

Tour: Sunshine Physics

Destination: Orlando, Florida

Specialization: Physics, Math & Space Science Itinerary: 6-days / 5-nights in Florida

	Su	unshine Physics - C	rlando		
Day	Morning	Afternoon		Evening	
1	Travel to Orlando; transfer to hotel & check-in		Welcome, Safety & Orientation	Local Dinner	Mini-Golf Challenge
2	Universal Studios Theme Parks (Islands of Adventure + Universal Studios Theme Parks) + Roller Coaster Physics Master Class & Ride Design / Six Degrees of Freedom Master Class			Dinner at Universal Theme Parks	
3	NASA's Kennedy Space Center at Cape Canaveral - Day Trip				Local Dinner
4	Orlando Science Center + Weather Balloon Engineering Master Class	Lunch, Wildlife Park & Airboat Eco- tour at Wild Florida Airboat Tours	I-Fly Physics Master Class with 1 Jump	Wonder Works & Pizza Party	
5	Universal Studios Theme Parks (Islands of Adventure + Universal Studios Theme Parks) + 'Behind the Adventure'' Walking Tour OR Weather Master Class			Farewell Dinner	
6	Free time in Orlando		Depart 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.

### Day 1

Dinner on arrival, contingent upon arrival time

Travel to Florida arriving at in the late afternoon or early evening. After boarding your coach you will be transferred to your hotel on International Drive. After check-in, we'll have our Welcome, Safety & Orientation meeting and get settled in. This evening we'll have dinner locally and then some fun with a Mini-Golf Challenge!

**Sample Hotel: Springhill Suites, International Drive** - Innovatively designed and ideally located for our groups, this hotel is a great place to relax, refuel and enjoy everything the area has to offer. Located minutes from great dining and attractions, groups will make themselves at home in spacious suites that include two queen beds, a pull-out sofa sleeper, mini-refrigerator, microwave, coffeemaker, complimentary high-speed Internet and more. Hotel amenities include an on-site fitness center, an outdoor heated pool, a business center, and a guest market. Breakfast is served at the hotel each morning.







**Pirates Cove Mini-Golf Challenge** - Plunge into the legendary world of 18th century buccaneers! Putt your way through mountain caves, across a full-scale pirate ship, over footbridges and under cascading waterfalls--all amid a fun-filled atmosphere of meticulously-kept landscaping and enchanting pirate lore.

#### Day 2

Breakfast & dinner included; lunch on own

Good morning Orlando! After breakfast, we'll transfer to Universal Studios Theme Parks. We'll have Park Hopper passes to explore both amazing parks — Universal Studios Theme Park and Universal's Islands of Adventure, and ride the Hogwarts Express to get back and forth! Wear your walking shoes!



Universal Studios Theme Park - Fun So Hard. It's just like watching your favorite TV shows and movies IRL, except with the ultimate ride-y things like twists, turns and drops. Face villains more menacing than your kids



pre-churros. Save the earth daily or even hourly. Oh and dragons, have we got dragons! And one of them even breathes real fire so that's cool (err hot). This is way beyond the movies.

Islands of Adventure Theme Park - Free Yourself to be Yourself. This is where it goes down. And up. And down again. To those who say "Yay adventure" we're here for you. Superheroes. Magical creatures. A school of witchcraft and wizardry. Even dinosaurs (turns out, not so extinct). Take a ride, multiple rides. Some will drench you. Some will just mess up your hair. Some will make your head spin (figuratively speaking). All of them will say: Every island is a new reality.

While here's we'll participate in two Master Classes with the Universal experts!

**Rip Ride Rockit – Roller Coaster Physics Master Class** - Students learn a heart-pounding lesson in physics that teaches just what makes roller coasters like Hollywood Rip Ride Rockit so thrilling. In small groups, students use data they gathered to create a visual representation of the ride's transfer of energy for a more cohesive understanding of physics principles. **Program Objectives:** 1) Explain and apply understanding of potential and kinetic energy. 2) Apply knowledge of the Law of Conservation of Energy to analyze rollercoaster data.





Transformers ROLL Out – Ride Design & Six Degrees of Freedom Master Class - Students learn about the engineering principles of the Six Degrees of Freedom and apply that knowledge to a hands-on analysis of TRANSFORMERS: The Ride - 3D. Students then use their new skills to reconstruct the ride vehicle's motion sequences. Program Objectives: 1) Explain and model how the Six Degrees of Freedom are used in ride design and development. 2) Differentiate between translational and rotational movement.

Tonight, we'll have dinner at the parks before heading back to our hotel for rest and relaxation.

## Day 3

Breakfast & dinner included; lunch on own

Rise and shine for a spectacular space day! Today we're heading to Cape Canaveral on Florida's eastern coast, home to NASA's Kennedy Space Center.

NASA's Kennedy Space Center - John Glenn, Neil Armstrong, Sally Ride and Jim Lovell are just a few names of the brave men and women that have launched into space from Kennedy Space Center, and now it's your turn to become a part of the space program. Your full day of exploration includes real space hardware, authentic attractions, inspiring exhibits and hands-on experiences. The incredible accomplishments of the Apollo moon program return to life in the amazing Apollo/Saturn V Center. In back-to-back IMAX® theatres, you'll feel the thrill of space exploration on five-story screens as you "float" right alongside NASA Astronauts. On guided tours into exclusive areas, you'll get a behind-the-scenes look at Kennedy Space Center's working space flight facilities. Strap in and experience interactive space flight simulators at the Astronaut Hall of Fame. Touch a real piece of Mars, see gigantic rockets, board the Space Shuttle Explorer and much more.



Your exploration of Kennedy Space Center starts with one of their world-renowned tours, where you depart the Visitor Complex to see awesome NASA facilities, including the massive launch pads, gigantic Vehicle Assembly Building, and exploring the awe-inspiring Apollo/Saturn V Center. There is much to do at the Visitor Complex when you return, from live action theatrical shows like Mad Mission to Mars, to the inspiring Astronaut Encounter briefing with an actual NASA Astronaut - one of the few people on Earth who have been to space. View ten-story high rockets from all eras of space exploration in the Rocket Garden, walk through a full-size Space Shuttle mock-up, see IMAX space films on gigantic five-story screens, and see an actual Gemini program capsule on display in Early Space Exploration. Added Option – Dine with an Astronaut. Ask us about availability and rates for your group.

**IMPORTANT TRANSPORTATION NOTE** – Please be aware that this day includes 10-hours of motorcoach time. As NASA is approximately a 1.5-hour drive from your hotel, the time reserved includes 3 hours of travel time plus 7-hours at NASA. If your school desires more time, we will be happy to book this for you but please be aware that motorcoach time is calculated hourly and you will be responsible for any additional fees incurred.

After our full day at Kennedy Space Center, we'll have dinner locally. It might be a great night for a walk, or even pool time!

#### Day 4

Breakfast, lunch & dinner included

Good morning Florida! Following breakfast, we'll head to the Orlando Science Center for a fabulous morning of lab work.

The Orlando Science Center & Weather Baloon Engineering Master Class - Truly one of the great activities in

Orlando! With four floors of exhibits, amazing giant screen movies and engaging live programming, this is a wonderful educational destination.

**Rise to the Challenge: Weather Balloon Engineering** - Become an aerospace engineer by experiencing the battle between gravity and buoyancy! By collecting data and calculating the opposing forces, teams create a balanced attachment that will suspend a model weather balloon in the atmosphere. Can your team rise to the challenge?



This afternoon we'll switch gears and head out to explore Wild Florida!

Wild Florida Airboat Tours - Located 45-minutes outside of Orlando, a visit into the northern Florida Everglades will be wild and fun! Experience a part of Florida that hasn't changed much from when early pioneers arrived in covered wagons in the 1800s. Climb aboard a U.S. Coast Guard certified airboat and catch a glimpse of alligators, eagles, turkeys, wild boars, roseate spoonbills, and other native creatures. Stroll through the Wildlife Park where you can see lemurs, sloths, zebras, and other animals native to South America, Africa, and Australia. Want to take a trip back in time to one of the first cattle operations in Central Florida? Hop aboard the Ranch Buggy Tour for a look at a working cattle operation that can trace its roots to the 1850s. Wild Florida is a feast for the eyes and the soul.





Educational Components: 1) Airboat Eco-Tour. Students will see a variety of animal and plant wildlife identified by airboat captains. Topics covered will include the Florida Ecosystem, native and invasive species, and interdependence attributes. 2) Alligator Presentation. Students will get an up-close look at alligators with an in-depth presentation of topics including lifecycle, diet, anatomy/physiology and behavioral aspects. 3) Wildlife Park. Students will be taken on a guided tour of the wildlife park with over 100 species of native and exotic animals including a walk through 'Hawk Swamp' to see what Florida looked like 1,000 years ago. Topics include the swamp ecosystem, endangered and threatened species, adaptations and characteristics of animals. Your package will include a 1-hour airboat tour, an alligator demonstration with photo, a BBQ lunch, a souvenir plus admission to the Wildlife Park; all with the master class educational elements as above.

Next, we're off for some physics flying!

*I-Fly Indoor Skydiving & Physics Master Class* - The STEM Master Class uses iFLY's unique vertical wind tunnel facility to make STEM exciting. Curriculum has been designed by STEM professionals and includes and an interactive presentation based on engineering and physics, a lab activity including parachute investigation, and full training for indoor skydiving by IBA certified flight instructors. Each student will fly one-on-one with an instructor for 1 minute in the tunnel. High flights, 'rides' to the top of the tunnel and extra rides are available at an additional charge.





This evening, we'll walk to WonderWorks for pizza and an evening of fun!

WonderWorks & The Outta Control Magic Comedy Dinner Show – Wonderworks is an amusement park for the mind, combining education and entertainment in over 100 hands-on exhibits for students of all ages. Students will feel the 65-mph hurricane force winds, be shaken by a 5.3 earthquake, play virtual sports, land the space shuttle, fly a fighter jet, lay on a bed of nails, design and ride their own roller coaster and even compete in a Laser Tag game in the world's largest Laser Tag Arena & Arcade.



Guests will also experience the "Outta Control Comedy/Magic Dinner Show" combining high-energy comedy improvisation with fun "magic" to thoroughly entertain audiences of all ages. During the show, schools will enjoy unlimited hand-tossed pizza, popcorn and soft drinks.

<u>Day 5</u>
Breakfast & dinner included; lunch on own



Rise and shine Florida! After breakfast in the hotel, we'll board our transportation and again travel to **Universal Studios Theme Parks**. Today we'll have a choice between various Master Class options (techers pick **ONE** option prior to travel), followed by a day of fun in the parks. Master Class Options include:

**Kongtrol Panel** - Bring students face-to-face with a sophisticated positioning system that controls an independently navigated ride vehicle through the rough, unpredictable terrain of Skull Island. By programming the ride vehicle commands to avoid collisions, students gain a hands-on understanding of how engineering principles translate into ride success.

**Behind the Adventure at Universal's Islands of Adventure** – Students will have the opportunity to discover the science involved in creating the world's most technologically advanced theme park. Behind-the-Adventure showcases the physics, technology, horticulture and general sciences that went into designing and building this state-of-the-art theme park.

**Special FX at Universal Studios Florida** – A special effects program to discover the secrets of making movie magic at Universal Studios. Through this interactive tour of Universal Studios, students will learn, hands-on, about the arts and sciences used to create some of the most spectacular special effects in motion picture history and what it took to recreate those effects in some of Universal Studios' most popular attractions.

*Our Weather: Planning for Nature* - Meet with and learn from Orlando's own Amy Sweezey. In this unique live presentation, you'll see what goes into understanding weather patterns and the impact they can have on theme park guests.

**Career Exploration & Preparation** - Before students can really focus on a career, they must first discover their natural strengths. This module provides self-assessment tools to define several areas of interest for students, then covers the entire process from application to interview and personal brand to work values.

Leadership Skills & Personal Development - Leaders have the ability to influence others within an organization. In this experience, students are asked to take a good look at their own spheres of influence and assess the impact they may



potentially make on others. They are provided tools they can use to positively influence their school or work environment and improve their personal people skills.

Afterwards, we'll enjoy our farewell dinner in Orlando.

## Day 6

Breakfast included, based on departure times

Good morning Florida! It's time to pack up and head home! Following breakfast, we'll have the morning free then will start to say goodbye to Florida as we head off for our flight home; taking memories with us that will last forever!



# SUNSHINE PHYSICS

Minimum Booking Numbers: 20 students

What's Included: Round-trip flights with a scheduled carrier

5-nights' accommodation in Orlando

Breakfasts & dinners daily starting with dinner on arrival and ending

with breakfast on departure, based on travel times Transportation for programmed activities & airport transfers

NASA's Kennedy Space Center & Visitor's Center

Mini Golf Challenge at Pirate's Cove

2-day Park Hopper passes to Universal Studios and Islands of

**Adventure Theme Parks** 

- Roller Coaster Physics Master Class

- Ride Design Master Class

- Master Class Option (pick one of six options)

WonderWorks Admission + Pizza Party at the Outta Control

**Comedy Dinner Show** 

Orlando Science Center Admission + Weather Balloon Engineering

**Master Class** 

Wild Florida Airboat Eco-tour + Lunch

I-Fly Sky Diving Physics Master Class with 1 Jump

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 in destination with the exception of Day 4

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, maid service, bellman service, 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.