



 MOREHEAD
PLANETARIUM+
SCIENCE CENTER



COSMIC Summer 2023

**Summer Science Camps
for Grades K-8**

Astronomy, coding, engineering,
and more!



2023 Camps

Young investigators will take an unforgettable science adventure with experiences for even the most curious minds. Through hands-on engaging activities, campers will learn about evolving technology, environmental preservation, chemistry, engineering, astronomy, and more!



CHOOSE YOUR CAMPS

Use the information in this camp guide and on our website to choose the camps that match your child's school grade level in Fall 2023 and your child's interests.



REGISTER ONLINE

Go to moreheadplanetarium.org/camp. When registration opens, you will see a "Register Now" button appear on the camp homepage — click the button to be redirected to CampDoc, our online registration platform.



SUBMIT REQUIRED CAMP FORMS*

After you register online, please complete the Health Profile in CampDoc for each of your campers.

*Morehead uses the CampDoc registration system, so you may see CampDoc instead of Morehead in your online billing record.

H₂O and You

Cool off from the summer heat by splashing and sloshing in this get-wet camp! Campers learn all about water, one of life's essential components. Ice, rivers, and clouds come to life as campers dive into concepts such as the water cycle, sinking, and floating. Don't forget to pack a towel!

Bugs!

In this camp, get down to a "bug's-eye view" and learn why many critters are actually some of our best friends. Campers build insect models to become more familiar with the small creatures with which we share our world.

Brain Games

Building on a natural enthusiasm for play, campers learn new games while concentrating on strategy and creativity. Camp concludes with "Game Day" — a chance for the campers to play all the games they have learned through the week. Wanna play?

Dino Detectives

Explore the exciting world of dinosaurs. Making Triceratops masks and getting to know a Tyrannosaurus Rex are just the beginning of the fun as campers explore what the world was like when dinosaurs ruled the Earth. Dinosaur enthusiast paradise!

Magic Tree House® Explorers

Like Jack and Annie, young campers enter the Magic Tree House® for an exciting space mission, including visits to an observatory, the International Space Station, and the Moon, to name a few. Daily story time will be an important part of this Magic Tree House® journey!

Space Cadets

Campers explore the Solar System and how we can protect our precious Earth. Activities include making a moonscape, participating in the "Gravity Games," holding a sun-safety fashion show, and sky watching with binoculars and telescopes. Are you ready for an Earth adventure?

Eco-Adventure

Engage in the wild world of animals by observing your surroundings and making a birdhouse for the once-endangered Eastern Bluebird. The exploration doesn't stop there -- clean up an oil spill, create an action plan for protecting the environment, and end the week with an up-close meeting of native North Carolina critters. You don't want to miss this Eco-adventure!

Insides Out

Snot, boogers, farts, pimples, pus, and more -- they may be gross, but they're also important to our bodies. In this camp, we'll be digging into all the gross things our bodies do and learning about the science of why they're important!

Inventors at Play

What toys use magnets? How do Frisbees fly? Campers explore these questions and more as they use Newton's laws of motion to create toy cars, make their own circuits, and experiment with flight. At the end of the week, campers put on their hardhats and create their own toy inventions.

Astronomy: Stellar Exploration

Look to the sky. What can you see with just your eyes? A lot more than you might think. In this camp, Campers learn to identify constellations, planets, and lunar craters, and find the International Space Station as it travels overhead. Campers visit the planetarium to explore Earth, the solar system, and the universe.

Biology: Animal Oddities

Open your eyes to the wild things all around you! What are cephalopods, and how do they communicate? Can bees really dance? Explore the amazing animal kingdom. Perform experiments to understand adaptations of native birds. Make a termite pheromone trail and even build habitats for our own animal creations. Be on the lookout for some awesome animal oddities!

Computer Science: Coding Adventures

Dive into the world of coding and learn how computers think! Control a city of roving robots, code your very own game, and use a Raspberry Pi to modify Minecraft! Campers learn the ins and outs of the coding world. This is just the beginning of a grand coding adventure!

Music Marvels

Campers explore how the physics of sound works to produce everything from Beethoven's "Ode to Joy" to today's hottest hits! They also investigate how different cultures have made different sounds with musical instruments. This week of art, culture, and science concludes with designing, creating, and playing new musical instruments.

Potion Productions

Let's do some chemistry! Campers mix up chemicals to make everything from toothpaste to soda to invisible ink, while learning what each concoction does and why. They also get a chance to market one of their creations and practice advertising skills. Campers end camp by making chemical-powered rockets!

Star Stories

"Star Stories" campers discover the mysteries of the night as seen through the eyes of Indian, Mayan, Greek, Egyptian, and Native American cultures. Then, they use their new knowledge to help present a show in the GSK Fulldome Theater.

Engineering: Going Green

Feel the power! Campers create their own energy while making windmills and cooking food in solar ovens. They also learn about oil drilling and the difference between renewable and nonrenewable energy. This camp is "electrifying!"

Engineering: LEGO® Robotics

Programming and engineering come to life with the aid of LEGO Mindstorms®. Campers will not only build with LEGO® bricks in this camp, but also engineer working robots with multiple sensors. Beware: artificial intelligence may take over Morehead after this camp!

Aeronautics: Aviation Innovation

How do Frisbees, planes, and helicopters travel through the air? Come experiment with the principles of lift, drag, thrust, and gravity. Campers will test their piloting skills with kites and paper planes and end the week by launching homemade rockets.

Campers can participate in a named camp only once during the summer. For example, a camper cannot register for "Insides Out" more than once.

SciVentures

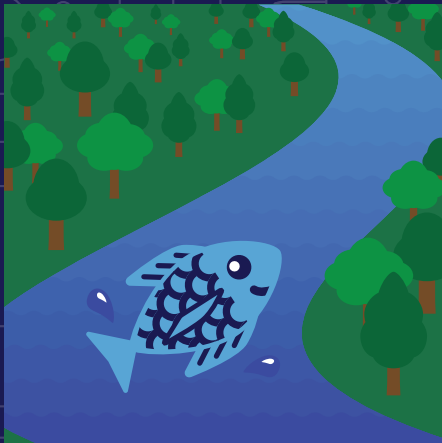
Summer Science Enrichment Program for Grades 6-8

This full-day experience gives middle schoolers the opportunity to explore fascinating real-world science themes in depth! Each week-long program combines practical lab work and fun hands-on activities, allowing your camper to envision themselves with a career in the sciences.



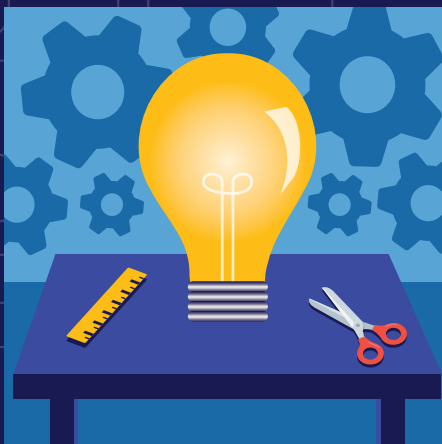
SciVentures: ROVing the UNIVERSE

In this SciVentures program, young scientists will learn about the limits of exploration and why scientists use Remote Operated Vehicles (ROVs) in places too extreme for humans. The students work in teams to learn about the foundations of ROV science so that the teams can design ROV solutions to complete “Mars” and “Ocean” challenges modeled on real world missions. The program culminates with each team constructing their own ROV from scratch and completing a series of challenges to test their design skills.



SciVentures: FIELD STATION

If your camper likes where the outdoors meets scientific discovery, this camp is for them! Designed specifically for middle school students who live and breathe science, SciVentures is Morehead’s summer program that combines true-to-life field work and lab experiences to create week-long excitement. Campers learn about local aquatic ecosystems, hike local trails, and tour water treatment facilities.



SciVentures: MAKE and CREATE

Tinker, fiddle, experiment, create, reuse, investigate, try, build, test, form, play! If any of these words describe your camper’s idea of fun, then *SciVentures: Make and Create* is the camp for them. We will be doing all of the above with everyday and not-so-everyday materials. Your camper’s only limitation in this class will be time and their imagination!

Policies

Please refer to Morehead's camp website moreheadplanetarium.org/camp for complete details about Morehead Summer Science Camps and SciVentures, including frequently asked questions.

DATES

Concierge registration opens for Solar Level (and higher) members	Jan. 17
Early registration opens for Morehead Family Level (and higher) members at 12 p.m.	Jan. 23
Early registration opens for UNC faculty/staff at 12 p.m.	Jan. 27
Public registration opens at 12 p.m.	Jan. 30

CAMP SCHEDULE

Morning extended care	7:30 AM - 8:45 AM
Morning drop-off	8:45 AM - 9:00 AM
Morning camp	9:00 AM - 12:00 PM
Morning pickup for half-day campers	12:00 PM - 12:15 PM
Lunch for full-day campers	12:00 PM - 1:00 PM
Afternoon drop-off for half-day	12:45 PM - 1:00 PM
Afternoon camp	1:00 PM - 4:00 PM
Afternoon pick-up	4:00 PM - 4:15 PM
Afternoon extended care	4:15 PM - 6:00 PM

SCIVENTURES SCHEDULE

Morning extended care	7:30 AM - 8:45 AM
Morning drop-off	8:45 AM - 9:00 AM
SciVentures	9:00 AM - 4:00 PM
Afternoon pick-up	4:00 PM - 4:15 PM
Afternoon extended care	4:15 PM - 6:00 PM

FEES

	Member*	Public
Half-day, one week K-5 camp	\$168.30	\$187
Full-day, one week SciVentures	\$445.50	\$495
Morning extended care (per week)	\$30	
Afternoon extended care (per week)	\$35	

\$50 deposit for each camp is required at the time of registration. Camp deposits are nonrefundable unless Morehead cancels the camp.

The balance of each camp fee must be paid by May 15, 2023. If you register on or after this date, you must pay the full camp fee at the time of registration.

The sessions and extended care taking place the week of June 19th will be 20% less to reflect the 4-day camp week.

For Coding Adventures, there will be a technology fee of \$44.

*Membership discount applicable to Family Plus level and higher.

REFUNDS

Cancellations made on or before May 15, 2023 will receive a refund minus deposits paid. Cancellations made on or after May 16 will not result in a refund, but any fees paid will be designated as a tax-deductible contribution to the Morehead Scholarship Fund.

LOCATION

All camps are located at Morehead (250 E. Franklin St. Chapel Hill, NC) or surrounding buildings on The University of North Carolina at Chapel Hill campus.

Schedule

Register online at www.moreheadplanetarium.org/camps

	GRADES K-1		GRADES 2-3	
	AM	PM	AM	PM
June 12 - 16	H ₂ O and You	Magic Tree House® Explorers	Potion Productions	Eco-Adventure
	Magic Tree House® Explorers	H ₂ O and You	Eco-Adventure	Potion Productions
June 20 - 23*	Dino Detectives	Brain Games	Music Marvels	Insides Out
	Brain Games	Dino Detectives	Insides Out	Music Marvels
June 26 - 30	Space Cadets	Bugs!	Inventors at Play	Star Stories
	Bugs!	Space Cadets	Star Stories	Inventors at Play
July 10 - 14	H ₂ O and You	Magic Tree House® Explorers	Potion Productions	Eco-Adventure
	Magic Tree House® Explorers	H ₂ O and You	Eco-Adventure	Potion Productions
July 17 - 21	Dino Detectives	Brain Games	Music Marvels	Insides Out
	Brain Games	Dino Detectives	Insides Out	Music Marvels
July 24 - 28	Space Cadets	Bugs!	Inventors at Play	Star Stories
	Bugs!	Space Cadets	Star Stories	Inventors at Play
July 31 - August 4	H ₂ O and You	Magic Tree House® Explorers	Potion Productions	Eco-Adventure
	Magic Tree House® Explorers	H ₂ O and You	Eco-Adventure	Potion Productions
August 7 - 11	Dino Detectives	Brain Games	Music Marvels	Insides Out
	Brain Games	Dino Detectives	Insides Out	Music Marvels

*No camp will be held on Monday, June 19 in observance of Juneteenth. This will be reflected in camp pricing.

GRADES 4-5		GRADES 6-8
AM	PM	FULL DAY
Biology: Animal Oddities	Computer Science: Coding Adventures	SciVentures: ROVing the Universe
Computer Science: Coding Adventures	Biology: Animal Oddities	
Astronomy: Stellar Exploration	Engineering: Going Green	SciVentures: ROVing the Universe
Engineering: Going Green	Astronomy: Stellar Exploration	
Engineering: LEGO Robotics	Aeronautics: Aviation Innovation	SciVentures: ROVing the Universe
Aeronautics: Aviation Innovation	Engineering: LEGO Robotics	
Biology: Animal Oddities	Computer Science: Coding Adventures	SciVentures: Field Station
Computer Science: Coding Adventures	Biology: Animal Oddities	
Astronomy: Stellar Exploration	Engineering: Going Green	SciVentures: Field Station
Engineering: Going Green	Astronomy: Stellar Exploration	
Engineering: LEGO Robotics	Aeronautics: Aviation Innovation	SciVentures: Field Station
Aeronautics: Aviation Innovation	Engineering: LEGO Robotics	
Biology: Animal Oddities	Computer Science: Coding Adventures	SciVentures: Make and Create
Computer Science: Coding Adventures	Biology: Animal Oddities	
Astronomy: Stellar Exploration	Engineering: Going Green	SciVentures: Make and Create
Engineering: Going Green	Astronomy: Stellar Exploration	



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PUBLIC REGISTRATION OPENS JAN 30

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MOREHEAD MEMBERSHIP

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