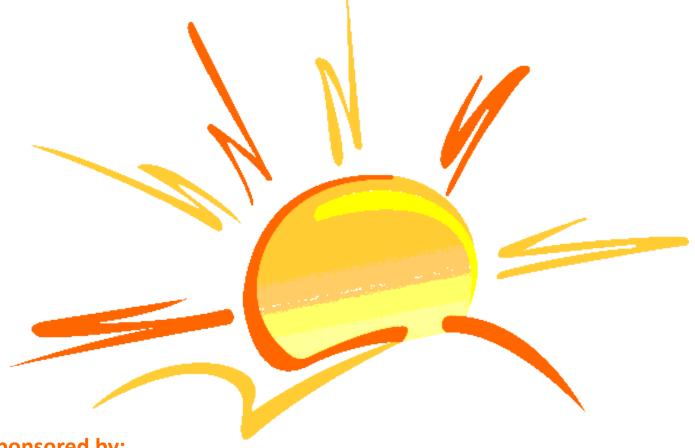
Summer of Innovation 2022

Course Guide



Sponsored by:





















What is the Summer of Innovation?

Several organizations from across the Southern Tier have united to offer unique learning opportunities for children and young adults during the summer months. These organizations have a common goal of extending the traditional school year into a third summer semester. Our offerings have another purpose as well – to provide students with STEM (Science, Technology, Engineering and Mathematics) skills that are essential to their success in the future.

Partnering organizations include:

- Corning Community College <u>www.sunycorning.com/stem-youth-college</u>
- First Tee-Corning www.firstteecorning.org
- GST BOCES <u>www.gstboces.org</u>
- Notre Dame High School www.notredamehighschool.com
- Science & Discovery Center www.sciencediscoverycenter.org
- Tanglewood Nature Center and Museum www.tanglewoodnaturecenter.com
- Wings of Eagles Discovery Center www.wingsofeagles.com

How do I register my child for these courses?

To register your child for any of the courses listed in this brochure, please go to <u>www.gstboces.org</u> and click on the link to the agency offering the course your child is interested in. From there, you will be able to access the registration information you need.

Enrollment is limited; please register early!

When registering for courses, please use the grade your child will enter in the fall unless otherwise indicated.

What is the cost of these programs?

The cost of these academies varies. Please see the course description for information on price.

Are scholarships available?

Scholarships are available from the following partners:

- First Tee-Corning
- Science & Discovery Center
- Tanglewood Nature Center and Museum
- Wings of Eagles Discovery Center
- Some scholarships are available to Elmira City School District students. Please contact Jennifer Biggs at (607) 735-3580.

Is transportation available?

Transportation is available for Elmira City School District students. Please contact Jennifer Biggs at (607) 735-3580 for more information.

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Join us for summer fun and learning at a variety of sites including:



1 Academic Drive, Corning



STEM Youth College @ SUNY Corning Community College

Powered by Black Rocket, a national leader in technical education.

Coding? Game Design? Javascript? Minecraft? Python? Roblox? If any of these are familiar to you or your kids and it's something you'd like to do, then the STEM Youth College through SUNY CCC is the right place to be in 2022! Ready to Launch? Programs are starting June 6.

For more information: www.sunycorning.com/stem-youth-college Call 607-936-5501 or email ilearn@corning-cc.edu with questions.

Select from:

3D Game Design with Unity Battle Royale: Make your first Fortnite-Style Video Game

Code Breakers JavaScript Developer Jam
Minecraft Designers Minecraft Modders
Minecraft Redstone Engineers Python Programmers

Roblox Coders & Entrepreneurs! Roblox Makers
Video Game Animation YouTube Content Creators

YouTube FX Masters Make Your First Video Game!

Code Your Own Adventure! Interactive Storytelling Inventor's League — Prototyping for the Future!

Full descriptions of each course are available on the website (2 levels, with recommended age groups: 8-11 and 11-14)

Also available at SUNY Corning Community College this summer:

Full STEAHM Ahead! (Girls, Grades 4-7)

July 18- 22 (Grades 6-7) and August 1-5 (Grades 4-5), 8:30 AM-4:00 PM,

Commons Building

Cost \$100, Scholarships available

Limited transportation available

The Full STEAHM Ahead Summer Workshop is a week-long program for girls that focuses on Science, Technology, Engineering, Arts, Health and Math education. Approximately 40 middle school girls from Chemung, Schuyler and Steuben counties will be selected based on essay applications to participate in this low-cost workshop. Girls will: learn how to code with Ozobots, creative coding robots; explore the night sky at CCC's Digital Dome; write and perform a drama production; develop math theory using supplies like pine cones; paint rocks to learn math sequences; learn to meditate and practice yoga for stress release; develop an engineering project that they can wear home and lots more. Also hear from women working locally in STEM careers to design your own career.

For more information: www.corning-cc.edu/student-life/steahm.php



@First Tee-Corning's Indoor Golf &Sports Training Center at the Arnot Mall

Robotic Olympics (Grades 6-9)

July 18-July 22, Monday-Thursday

OR

August 1-August 4, Monday-Thursday Visit www.firstteecorning.org to register

FREE camp for all students. Transportation is available for Elmira City School District students.

Welcome to the Robot Olympics! A FREE opportunity for campers to explore VEX IQ by working in groups to build and code their robots to compete in various Robot Olympic Events. Campers will begin by building the Autopilot and using the remote control to play robot soccer. They will then explore more complex coding and construction to build a Clawbot and code it to compete in different robot challenges and events!

The Robot Olympics camp will take place over four days, with each day providing new challenges and competitions. Participants will be in divided into beginner and experienced groups based on past experiences and knowledge.

Robotics Camp is a collaboration between Elmira City School District, First Tee - Corning, Williams Toyota of Elmira, Triangle Fund and Chemung County Youth Bureau.

@GST BOCES Bush Education Center

459 Philo Road, Elmira

Please note: There is no charge for courses at the Bush Education Center.

Online registration information for classes at the Bush, Coopers and Wildwood Education Centers can be found at www.gstboces.org. Please click on the Summer of Innovation banner at the top of the page. For more information, please contact Tammy Clark at (607) 281-3152.

Animal Science (Grades 7-10)

July 25-29 or August 15-19, 9:00 AM-12:00 PM

The Animal Science Summer Academy will give students hands-on animal care and handling experience. Each day will include care for animals including alpacas, a donkey, chickens, dogs, rabbits and various small mammals and reptiles. Students will clean enclosures, prepare daily diets, provide enrichment activities and learn how to groom and monitor the health of animals. Throughout the week, students will participate in lab activities and practice positive, reward-based training techniques.

Auto Body: Intro to Custom Paint and Graphics (Grades 7-10) June 27-July 1, 9:00 AM-12:00 PM

Students will learn custom paint techniques used in the industry. They will achieve this using airbrushes, paint spray guns, stencils and free-hand techniques. They will layout and complete and pre-determined project. Then, they will be able to come up with their own design for a panel. If time permits, students will learn about the exciting technique of water transfer printing, also known as hydrographics.

Auto Technology: Pit Crew Challenge (Grades 7-10) June 27-July 1, 8:00 AM-12:00 PM

If you're an auto racing fan, this class is for you. You'll begin the week by creating a team with your classmates and participating in a pit row competition. You'll learn to mount and balance tires, resurface brake rotors, retrieve and translate OBD II Codes with industry-leading scan tools, safely and correctly operate an automotive lift and take a field trip to a local auto dealership.

Auto Technology: Valve Cover Racers (Grades 7-10)

June 27-July 1, 8:00 AM-12:00 PM

Participants will begin the week creating a team with classmates. Teams will work together to develop a setup strategy to have the fastest race times as they build a valve cover racer with an engine valve cover and a skateboard. They'll also learn lift set-up and safety, tire machine use and safety, fluid identification and will take part in a tire changing competition.

Culinary Arts: Rolling with the Dough (Grades 7-10) July 11-15, 9:00-11:00 AM

Students will learn how to make cookies, pizza dough from scratch, doughnuts and basic lean dough. At the end of the week, students will participate in a cookie-themed challenge.

Digital Media Arts: Stop Motion Animation Film (Grades 7-10) July 11-15, 9:00 AM-2:30 PM

This is for students that want to bring creative writing, photography, set design and audio production together to create a 15 second animated mini-movie using a stop motion process. The video will be provided to students and, if time allows, students also will create a physical flipbook to take home as well. Please bring a brown-bag lunch each day.

@GST BOCES Coopers Education Center

9579 Vocational Drive, Painted Post

Please note: There is no charge for courses at the Coopers Education Center.

Auto Body: Custom Painting and Graphics (Grades 7-10) June 27-July 1, 9:00 AM-12:00 PM

Students will learn custom paint techniques used in the industry. They will achieve this using airbrushes, paint spray guns, stencils and free-hand techniques. They will layout and complete a pre-determined project. Then, they will be able to come up with their own design for a panel. If time permits, we will learn about the exciting field of vehicle wrapping.



Auto Technology: Let's Go Racing (Grades 7-10) June 27-30, 9:00 AM-12:00 PM

Campers will be introduced to and use many power and hand tools, including MIG welders. Students will have a chance to work as a team as they compete their way through the week, scoring points for each event, including a pit row challenge. We will ultimately crown a winning team for the week. Participants will build, modify and then race valve cover racers (these are an engine cover, mounted to a skateboard, that runs on a track). They will have a chance to try different arrangements with their racers and ultimately see who can make the fastest racer. Finally, we will visit either Alfred State College Motorsports and Powersports programs or Woodhull Raceway.

Cosmetology: Salon Chic Summer Academy (Grades 7-10) July 5-8, 9:00 AM-12:00 PM

Do you enjoy making people feel better about themselves? Come to GST BOCES Cosmetology Summer Academy at the Coopers Campus. Each student will learn the importance of hygiene and sanitation, braiding, manicuring, pedicuring and plain facials. Summer of Innovation students will get to work one-on-one with senior students from the Cosmetology program.

Culinary Arts: Farm to Table Experience (Grades 7-10) June 27-July 1, 9:00 AM-1:00 PM

Did you ever wonder what the Farm to Table movement is all about? This week-long camp will dive headfirst into what that actually means. Students will visit local farms including a bison ranch and a CSA (community supported agriculture) farm. The class will visit the local Corning Farmers' Market to talk to various produce, meat and local food processors. Students will make their very own gathering basket. The week will end with students creating a gourmet meal made from all locally-sourced ingredients. Students will be preparing their own lunch all week.

Culinary Arts: Perfect Puff Pastry (Grades 7-10) July 5-8, 9:00 AM-1:00 PM

Who doesn't love truly decadent and artfully-crafted pastries? A common ingredient for many flaky delicacies is puff pastry. Students will learn the secret to make this delicate treat. They will be able to turn their pastry into traditional cheese straws, flaky cinnamon rolls, fruit filled Danish and savory bacon and cheese pinwheels. This summer camp includes a field trip to a local bakery. Students will be making their own lunch each day.

Culinary Arts: Summer in Italy (Grades 7-10) July 11-15, 9:00 AM-1:00 PM

Why do people love Italian food so much? Is it because of the rich tomato sauce in so many dishes? Could it be the melted, gooey cheeses? Or is it because pasta is a preferred comfort food? You could say it is because all of these things, combined with the fact that most delicacies are extremely simple to prepare. Students will learn how to prepare classic Italian cuisine such as a tangy marinara, homemade pizza, made-from-scratch pasta, traditional alfredo and sweet chocolate chip cannoli. This summer camp includes a field trip to the Southern Tier Provisions Italian Market Deli.



Digital Media Arts: Creative Ventures (Grades 7-10) June 27-30, 8:30 AM-2:00 PM

If you love art, this class is for you! You'll practice computer graphics (Adobe Photoshop), photography, video and vinyl graphics. You will create photo composites using two different images, a vinyl transfer for a T-shirt, a photo cup and a button. You also will produce a short video using key frame animation. Please bring a brown-bag lunch each day.

@GST BOCES Wildwood Education Center

1126 Bald Hill Road, Hornell

Please note: There is no charge for courses at the Wildwood Education Center.

Cisco Networking Academy (Grades 7-10)

June 27-July 1, 8:00 AM - 1:00 PM

Learn to build your own computer! We'll go step by step through the process, identifying each component along the way. If time allows, we'll set up a multi-monitor display that is a gamer's dream!

Day one: Identify basic Personal Computer (PC) components and attach motherboard, ram, hard drive, power supply, CD/DVD drive, etc.; introduce command prompt; PC tear down and PC component identification.

Day two: BIOS overview; create batch file; introduce networking cables; make networking cable.

Day three: DOS batch file; laptop disassembly part I; peer-to-peer network.

Day four: Laptop disassembly part 2; wireless networking lab.; overview of closets and networking devices.

Day five: Go over new PC parts; have students build virtual PC; Begin PC build; Complete PC build &

do multi monitor set-up, if time allows.

Intro to Cosmetology (Grades 7-10)

June 27-July 1, 9:00-11:30 AM

Each student will learn the importance of hygiene and sanitation, manicuring, pedicuring, basic color theory, color application, blow dry techniques and thermal hairstyling. The Summer of Innovation students will collaborate and work one-on-one with our senior students.

Criminal Justice: CSI (Grades 7-10)

June 27-July 1, 9:00 AM-12:00 PM

Participants of this academy will learn through a variety of methods to include: short lectures (which will include a crime scene technician or police investigator as a guest speaker), "hands-on" activities and role-playing. Each day will include a short mystery that students must solve.

Photography can be a vital part of the criminal trial process because it provides the court with visual aids to depict what may have happened at a crime scene. Therefore, participants will also learn the correct procedure and process of crime scene photography.

Besides photography, the following areas will be explored during the academy:

- the importance of DNA to a criminal investigation
- how to make a plaster mold from a foot impression
- the classifications of fingerprints and how to dust for fingerprints at a crime scene
- how to collect and analyze trace evidences
- group activities to teach students teamwork
- different competitions throughout the week that are based around CSI and law enforcement.



@Notre Dame High School

1400 Maple Avenue, Elmira

Looking for something fun for your kids to do this summer? Check out the wide variety of summer academies being offered at ND! All registrations are being taken online at www.notredamehighschool.com. Checks should be made payable to Notre Dame High School and note Summer Camp on the memo line. Mail your payment to: Attn: Michelle Barkley, Notre Dame High School, 1400 Maple Avenue, Elmira, New York 14904. All camps are filled on a first come, first served basis. Registration for the camp is not complete until we have received payment. If you prefer to drop your payment off at Notre Dame High School, you may drop off your payment to the Main Office between 8:00 AM and 3:15 PM Monday through Friday. Please note, students registering for a morning and afternoon session may pack a lunch and eat in the cafeteria or outdoors, weather permitting. Further details will be sent via letter to registrants.

Taste the Rainbow (Grades 4-9)

June 27-30, 8:00-11:30 AM

You've heard that you need to eat the rainbow each day, but, what does that mean? Learn the importance of proper nutrition by creating tasty recipes that meet current USDA nutrition guidelines. Think eating healthy is expensive? Discover how to stretch your dollar without sacrificing taste or nutrition.

Fee: \$125

Just Desserts (Grades 4 - 9)

June 27-30, 12:00-3:30 PM

Come for a fun filled week of making tasty treats. Learn the basics behind baking by creating new desserts each day. Participants will explore making everything from brownies and cupcakes to crème brulé. Learn proper measuring techniques as well as the importance of following dessert recipes as closely as possible.

Fee: \$125

Game Theory (Grades 4-9)

July 5-8, 8:00-11:30 AM

Did you know that there are rules when you create a game? How can you tell if it's fair or not? Come discover the fun of board games while learning what it takes to create the perfect game. Participants will design their own games after exploring a variety of classic as well as modern board games.

Fee: \$100



Poetry and Photography (Grades 5-9)

July 5-8, 12:00-3:30 PM

Students will take pictures or find pictures based on poetry to help inspire their poetic writing. Participants will learn about how emotions and experience are conveyed in both poetry and photography and learn how to match the emotion and experience of poetry to pictures and vice versa. Students will share their curated poems and pictures with each other and also do a small photo/poetry autobiography.

Fee: \$100

Curious Writers (Grades 5-9)

July 11-15, 8:00-11:30 AM

Students will learn to "turn off the editor" and write creatively, using various creative writing books and tools. We will use an assortment of media and spaces to draw inspiration from. The emphasis will be on "first thoughts" and free-writes that help students get in touch with topics they can explore more and also ultimately use to write academic papers.

Fee: \$100

Prosthetics Production (Grades 5-9)

July 18-22, 8:00-11:30 AM

Student teams will investigate biomedical engineering and the technology of prosthetics. Students will create lower leg prosthetic prototypes using various ordinary materials. Each team will debut its prototype at a final event and students will evaluate the device's strengths and weaknesses, giving insight into the characteristics and materials biomedical engineers consider in designing artificial limbs.

Fee: \$100

Children's Literature Live! (Grades 5-9)

July 25-29, 8:00-11:30 AM

Calling all young actors/actresses! Students will work collaboratively to select one fairy tale to add their own twist to and to write their own script. Over the course of the week, children will read and write their scripts, create simple costumes, props and scenery. Students will bring the plays to life on stage at the end of the week.

Fee: \$100

Comic Creations Camp (Grades 5-9)

August 1-5, 8:00-11:30 AM

Does your reader love graphic novels? They are not alone. Join with others to learn about the origin and history of graphic novels from other cultures. Students will curate their own graphic novel using either their own drawings and illustrations or by using computers or other tools to help them illustrate their stories. Students will each leave with their own graphic novel at the end of the week.

Fee: \$100



Scrapbooking Secrets (Grades 5-9)

August 8-12, 8:00-11:30 AM

Students will learn the secrets to scrapbooking and will be making their own scrapbook full of their own creations, memories, photographs, writings, magazine clippings and other creative materials. The class will experiment with color, texture, combinations and symmetry. Students will also make a class scrapbook full of memories of our time together learning the secrets of scrapbooking.

Fee: \$100

Science & Discovery Center

- Please, go to www.sciencediscoverycenter.org to register.
- Camp costs vary.
- All camp registrations are on a first come, first served basis.
- Registration is not complete until all registration fees are processed.
- Space is limited. Register early.
- A limited number of financial camperships are available to families in need. Applications are available on our website.
- Like us on Facebook for the most up-to-date information.

Engineering Recycled (Grades 1-3)

July 5-8, 8:30 AM -12:30 PM

ocation: First Tee-Corning (at the Arnot Mall)

We will be engineers as students unleash their creativity to make some cool projects out of recycled materials. Build junk robots, water balloon launch pads and so much more to take home and share. Students learn about the engineering process to design, create, and test new ideas while learning about the importance of recycling.

Outdoor Adventures (Grades 1-3)

July 11-15, 8:30 AM- 12:30 PM

Location: Spencer Crest Nature Center

Create works of art while secretly using math and science. Painting, drawing, sculpting, crafting and more. We will be creative and scientific, while getting a little messy and having lots of fun creating original works of art!

Mad Scientist Training Academy (Grades 1-3)

July 25-29, 8:30 AM- 12:30 PM

Location: First Tee-Corning (at the Arnot Mall)

Come make a mess with us! This week campers will get a little messy while experimenting with chemical reactions. Campers will make sticky, slimy, fizzy, and fluffy stuff out of everyday materials. Have fun making fluffy slime, squish painting, creating some messy art projects, gummy worms and more.



Artful Antics Jr. (Grades 1-3)

August 1-5, 8:30 AM -12:30 PM

Location: First Tee-Corning (inside the Arnot Mall)

Create works of art while secretly using math and science! Painting, drawing, sculpting, and more. We will be creative and scientific, while getting messy and having lots of fun creating original works of art like, creating optical illusions, pendulum paining, origami, tile printing, and more!

"The Flood of 1972" Environmental Issues Camp (Grades 4-6)

June 27-July 30, 8:30 AM -12:30 PM

Location: Heritage Village, Corning

This camp will be held at Heritage Village in Corning. Campers will look into the devastation and destruction of the Flood of 1972. We examine various environmental issues with lots of hands-on activities. We will take a field trip by bus to the Tioga Dam see how it operates, and how it helps avoid flooding. We will produce a short video using images and information of the flood of 1972 as preserved in the archives at Heritage Village, and we will construct a model of a river and observe how water moves through the land and flooding can take place. *This camp is 4 days, Monday-Thursday

July 5-8, 8:30 AM -12:30 PM

Location: Spencer Crest Nature Center

Nature Unleased (Grades 4-6)

Campers will experience nature first hand with daily hiking through the trails at Spencer Crest Nature and Research Center. We will learn about animal engineering and build our own versions of their creations, including homes, nests, and dams. Campers will learn about solar energy by creating a solar oven and sun printing. We will explore fresh water ecosystems through pond water testing and observations. Through connecting with nature, campers will grow to love and protect the natural world!

Inventor's Workshop (Grades 4-6)

July 11-15, 8:30 AM -12:30 PM

Location: First Tee-Corning (inside the Arnot Mall)

Put your imagination and creativity to work! We'll supply old computers, clocks, appliances, typewriters, machines and tools, and you use hand tools to take them apart. Use the parts to invent something new and build a model of your invention. Play Invention Jeopardy, and build a small working motor. On Friday, family and friends are invited to celebrate your creativity and attend a presentation and small reception.

Sizzlin Science (Grades 4-6)

July 18-22, 8:30 AM -12:30 PM

Location: First Tee-Corning (inside the Arnot Mall)

Let's make science sizzle and pop! Spend the week learning about chemistry. We will experiment with chemical reactions, such as making exploding paint bombs, color changing slime and elephant toothpaste. Wear your old clothes, things are bound to get messy!



Interactive Engineering (Grades 4-6)

July 18-22, 8:30 AM -12:30 PM

Location: Corning Community College

Think and build like an engineer! Design, test, and create gizmos and gadgets that really work. We will experiment using different items to build doodlebots, scissor lifts, and an articulated hand. Make marble runs, catapults and more! Take home everything you build and show off your engineering skills.

Boardgames and Beyond (Grades 4-6)

July 25-29, 8:30 AM -12:30 PM

Location: Corning Community College

Create, build, and play indoor and outdoor games. Campers will spend the week creating and making their own indoor and outdoor games. Make games like: foosball, minute-to-win-it challenges, and an outdoor game. Design your own board games. Make your own spinners and game pieces. You get to keep everything you make!

Out of This World (Grades 4-6)

August 1-5, 8:30 AM -12:30 PM

Location: Corning Community College

Everything space: learn about the Apollo moon landing, build and launch your own rocket. We'll play team Jeopardy where all the questions are about space, we'll make a computer model of the Solar System where the planets orbit correctly, and make a model that explains the phases of the Moon.

Artful Antics (Grades 4-6)

August 8-12, 8:30 AM -12:30 PM

Location: First Tee-Corning (inside the Arnot Mall)

Create works of art while using science and math! We will use different media throughout the week and learn techniques used in painting, drawing and art. Make pendulum paintings, canvas painting, string art, perspective drawings, and simple clay sculpting.

Photography (Grades 5-7)

August 8-12, 8:30 AM -12:30 PM

Location: Corning Community College

Learn about simple black and white photography and developing in a darkroom – and take pictures with a pinhole camera that you made! Make photograms and sun prints – using natural lighting to make cool images. Learn about the science and art of perspective – how artists learned to draw before photography was invented. Then, let's have some fun with digital photography, and play with the images we make with special photographic effects (and take your prints home!)



Fabulous Fibers (Grades 5-7)

August 15-19, 8:30 AM -12:30 PM

Location: First Tee-Corning (inside the Arnot Mall)

Join us for a week of colorful fiber exploration that includes decorative arts, math skills, sculpture, and crafting. Campers will learn about pattern making and natural fabric dying. We will try our hands at embroidery and create designs using yarn and burlap. Campers will experiment with yarn and all its possibilities, from wall hangings to finger knitting, nail and string art, and various types of weaving. Learn skills to take home with you!

Bits and Bytes (Coding and Programming) (Grades 4-6)

August 15-19, 8:30 AM -12:30 PM

Location: Corning Community College

We will examine all aspects of computers – how they are built, how they operate, and how they can be programmed. We will learn about "binary" numbers, do "Scratch" coding, make simple websites with HTML – even take apart some computers and see what's inside! Make games, obstacle courses, and race tracks, all through the use of basic programming concepts like logic and control structures.

@Tanglewood Nature Center

443 Coleman Avenue, Elmira

Pricing and Hours:

- Regular Day 10 AM-3 PM \$190
- Extended Day 9 AM-4 PM \$240
- Extended Day 8 AM-5 PM \$290
- More options available online

Registration:

Registration is on a first come, first served basis. You must be a member of Tanglewood to register a child for camp – membership fees are not included in the camp registration price. Registrations can be done online only at www.tanglewoodnaturecenter.com. For more information, contact Deanna at (607) 732-6060 ext.100.

Camp Yucky (Grades K-2)

June 27-30 (no camp on Friday)

- Explore the muddy, slimy, oozy, and sometimes yucky side of science
- Dissect an owl pellet while learning about digestion
- Meet Tanglewood's collection of creepy crawlies
- Learn how to find animals based on animal tracks and scat
- This camp is ideal for kids who don't mind getting a little messy and are ready for hands-on nature adventures!



Forest Forensics (Grades 3-5)

June 27-30 (no camp on Friday)

- Play games in the woods that will fine tune your animal senses
- Explore the creek to find camouflaged creatures and hidden secrets of the soil
- Find fossils and rearrange owl pellet bones to piece together mysteries of the past.
- This camp is ideal for inquisitive minds that enjoy being outdoors

Dino Dig (Grades K-2)

July 5-8 (no camp on Monday)

- Explore the woods to find your very own fossils
- Get up close and personal with the dinosaur descendants that we have here at Tanglewood
- Create and hatch your own dinosaur egg to take home
- This camp is ideal for any dinosaur, animal, or nature lover!

Pinecraft (Grades 3-5)

July 5-8 (no camp on Monday)

- Learn about outdoor skills inspired form the hit videogame Minecraft
- Get creative and build you own forts using resources around you
- Learn basic survival techniques like plant, animal and mineral ID
- Explore our woods with guided hikes and a campfire at the end of the week
- This camp is ideal for campers who want to put their videogame skills to the real world

Bird Brains (Grades K-2)

July 11-15

- Explore what makes birds the incredible creatures they are
- Help care for some of Tanglewood's feathered ambassadors
- Go bird watching from the treehouse and on the trails
- Meet our animals, like Hank the Hawk and Sophie the Owl up close
- This camp is ideal for any kids who wonder about birds and are interested in caring for them!

Reptile Round-Up (Grades 3-5)

July 11-15

- Get up close and learn more about our reptilian animal ambassadors
- Flip over logs to find sneaky salamanders and get your feet wet catching frogs and toads in the ponds
- Perform wacky reptile experiments and then meet the animals that inspired them
- End the week with a reptile race!
- This camp is ideal for campers who love reptiles, amphibians, and don't mind getting a bit muddy and messy



Frogs and Fishes (Grades K-2) July 18-22

- Flip over logs to find sneaky salamanders and get your feet wet catching frogs and fish in the ponds
- Learn the basics of fishing like casting, knot tying, and baiting a hook
- Meet Tanglewood's amphibians and learn about their life cycles
- This camp is ideal for campers who love being in and learning about nature and don't mind getting a bit muddy and messy

Fishing (Grades 3-5)

July 18-22

- · Basics of fishing, including casting, knot tying, safety and more
- Fish in different ponds all over Tanglewood and catch frogs
- Learn about and catch the numerous fish species that inhabit NY
- This camp is ideal for beginning and expert fishers who want to grow their skills

Pokémon (Grades K-2 and Grades 3-5)

July 25-29

- Discover Pokémon that are based on real animals, many of which reside in the museum!
- Hike the trails and catch insects and frogs with your very own Pokéball
- Make up your own Pokémon and battle them against other trainers
- This camp is ideal for aspiring Pokémon trainers and professors!

Critter Care (Grades K-2)

August 8-12

- Learn how we care for over 40 different types of animals at Tanglewood
- Discover the tricks of training animals with positive reinforcement working with animals like mammals, birds, and more!
- Personally meet each major animal group and care for our critters from tooth to toe!
- This camp is ideal for kids who love animals, want to learn how Tanglewood cares for the animals that call us home, and don't mind getting a little messy.

Animal Pawsibilites (Grades 3-5)

August 8-12

- Discover what amazing opportunities there are to work with animals!
- Care for some of animals that call Tanglewood home
- Uncover the basics of animal training when working with animals like birds and mammals
- Put your skills to the test with practice "X-rays" and pet exams
- This camp is ideal for kids who want to work with animals when they grow up and are ready for hands-on animal fun!



Nature's Superpowers (Grades K-2)

August 15-19

- Explore how animal adaptations are nature's true superpowers
- Learn about animals that inspired super heroes like Batman and the Wasp
- Test your super powers during an obstacle course and other challenges
- Meet super animals like Sophie the Owl and General the Bearded Dragon
- This camp is ideal for any super hero in training ready to have some hands-on nature fun!

Eco Engineers (Grades 3-5)

August 15-19

- Design and build as we look to nature for inspiration
- Create and play with simple machines like seed bomb launchers
- Learn how nature is used in past and new technology
- This camp is ideal for those who like to create from the nature around them

Go Wild! (Grades K-5)

August 22-26

- Go home laughing and grass-stained after a day of playing games
- Sculpt mud pies and make fossil prints
- Create works of art with natural items found in the woods
- This camp is ideal for kids who enjoy being outdoors and don't mind getting a bit messy

Forts and Forests (Grades K-5)

August 29-September 1 (no camp on Friday)

- A week full of fun in the woods!
- Go on a wilderness adventure and build a fort in the woods
- Play in the woods and explore who or what might be living there
- This camp is ideal for kids who love being outdoors and don't mind getting a bit messy!



@Wings of Eagles Discovery Center

339 Daniel Zenker Drive, Big Flats

Wings of Eagles Discovery Center courses are \$200 for a full day course. Take home kits are \$45. A limited number of scholarships are available for children who qualify. Please call 607-738-3054 for more information. To register for courses at the Wings of Eagles, please go to www.wingsofeagles.com.

Maker Space (PreK)

July 11-15, 9:00 AM-3:00 PM

This class is designed for our 3-4 year old learners and will be offered as a full day class. Students in this PreK group will get an introduction to our maker space and will have the opportunity to explore and use engineering and math skills.

Maker Space Tot (Grades K-2)

July 18-22 9:00 AM-3:00 PM

Are you curious about how things work? You can use your own imagination and creativity during this week using LEGOs, simple science and stories. Come explore with us! We also offer take home kit offers for independent learning.

Maker Space Tot 2 (Grades K-2)

August 1-5, 9:00 AM-3:00 PM

Come to our maker space and explore hands on crafts, sewing, 3-D printing, LEGOs, programming and robotics. This session will focus on making with our little learners and will be part two of the class offered earlier in the summer.

Exploratorium (Grades K-2)

July 25-29, 9:00 AM-3:00 PM

Discover all that the world has to offer in this fun and exciting class about how the world works. We will discover and explore physics, chemistry, biology and more.

Lego Learners With Spike (Grades K-2)

August 15-19, 9:00 AM-3:00 PM

Students will build and create various engineering designed projects using LEGOs while also completing various hands-on challenges and inventive projects.

Become a Stemster (Grades K-2)

August 8-12, 9:00 AM-3:00 PM

Rock out all the STEM projects during this fun and exciting class. Make the most out of this week and become a card-carrying STEM learning kid. We will work on engineering/ designing and follow in the footsteps of great aviation pioneers like Glen Curtis and the Wright Brothers.



3-2-1 Blastoff (Grades K-2)

August 8-12, 9:00 AM-3:00 PM

Do you want to be an astronaut when you grow up? If so, this class is for you. Learn the in and outs of outer space. Learn about what it takes to rocket into space. Fun hands on activities including prevocational skills and more during this weeklong program.

Mars Base Eagle (Grades 3-8)

August 1-5, 9:00 AM-3:00 PM

Did you know that we are projected to have a man on mars by 2040? Learn about Mars and experience how we will colonize the planet in the near future. Learners can join our virtual season via zoom, using a packet of take home materials provided. Students will have a family pass to visit our colony during regular business hours. We also offer take home kit offers for independent learning.

Building Contruction Maker Space (Grades 3-8)

July 11-15, 9:00 AM-3:00 PM

Our Makerspaces goal is to provide students with a hands-on, creative, user friendly, "anytime, anyplace", opportunity to build and create things. This class will allow students the opportunities to use basic construction building tools and build prevocational skills. We will be constructing projects that could include yard games like corn hole and Yahtzee! If you joined us last year, come again and make something brand new.

Take Flight (Grades 3-8)

July 11-15, 9:00 AM-3:00 PM

Hop into the pilot seat, learn the basics of aviation; take the controls and get ready to learn the basics behind flight. We will build airplanes and learn using actual flight simulators. Our new and upgrade virtual reality experience is heart stopping fun and excitement. This non-stop action is great for students that love video games and science. We will also be exploring, building, and launching rockets during this take flight course. We also offer take home kit offers for independent learning.

NXT Mindstorm Robotics (Grades 3-8)

July 18-22, 9:00 AM-3:00 PM

Do you love the Disney/Pixar movie WALL-E? Do you like to build things using LEGOs? Have you ever thought about programing your own robot? If you answer yes to these questions our LEGO Robotics course is for you! This introductory course introduces students to the basics of NXT LEGO Robotics. Students will work in teams to design, build and program their own robots. Students will be involved with programming their robots through several challenges.

The Science Behind Sports (Grades 3-8)

July 25-29, 9:00 AM-3:00 PM

Do you like to play sports? Do you enjoy demonstrating how powerful your body can be? When you play in gym you are also doing science. Sports are a powerful example of science at work. Come explore the science and enjoy playing sports and game with classmates.



Science on the Daily Part 1 (Grades 3-8)

July 18-22, 9:00 AM-3:00 PM

Come out and learn all about different careers and jobs in each of the different science fields. Fields trip to nearby local business will make this class an all around fun experience.

Science on the Daily Part 2 (Grades 3-8)

August 15-19, 9:00 AM-3:00 PM

Come out and learn all about different careers and jobs in each of the different science fields. Fields trip to nearby local business will make this class an all around fun experience.

Forensics (Grades 3-8)

July 25-29, 9:00 AM-3:00 PM

Solve the mystery at the museum while building your skills at forensics. Fingerprinting, DNA analysis, impressions, and more. You will use your best STEM skills to solve the case.

Engineering Design with Water Fun (Grades 3-8)

August 15-19, 9:00 AM-3:00 PM

Learn science, math and engineering while playing with the design of rollercoasters and water slides. Have you ever wondered why rollercoasters work? Why are water slides so fast? Could we build a better slip and slide? This hands-on camp will teach you how to think like an engineer.

Career and Vocational Training 101 (Grades 3-8)

August 8-12, 9:00 AM-3:00 PM

It's never too early to explore careers and vocations. This week-long course will include hands on vocational training and guest speakers in different careers available in our area. Fields trips also help to round out this class.

Notes

Notes



Summer of Innovation 2022 partners:

- Corning Community College <u>www.sunycorning.com/stem-youth-college</u>
- First Tee-Corning www.firstteecorning.org
- GST BOCES www.gstboces.org
- Notre Dame High School <u>www.notredamehighschool.com</u>
- Science & Discovery Center www.sciencediscoverycenter.org
- Tanglewood Nature Center and Museum <u>www.tanglewoodnaturecenter.com</u>
- Wings of Eagles Discovery Center <u>www.wingsofeagles.com</u>