Mission: Tampa Bay

STEM Camp for Middle School Girls



Program Guide & Application Materials

June 2-4, 2023

Hillsborough County Public Schools

Suncoast Youth Conservation Center











Welcome



May 1, 2023

On behalf of Hillsborough County Public Schools and The Suncoast Youth Conservation Center, it is with great excitement that I formally welcome you to the 2023 *Mission: Tampa Bay* Girls STEM Camp – Summer Experience!

This 3-day summer camp has been reimagined to fit the everchanging world of STEM and will be the first of its kind for our middle grade female students in Hillsborough County Public Schools. During the camp our young engineers will plan out investigations and expeditions, pilot underwater ROVs to support the investigations, and travel upon kayaks to explore the Tampa Bay waters to support their investigations.

Below you will find the *Mission: Tampa Bay* summer program agenda and on subsequent pages the registration documents. Participants chosen for the experience will be selected by their school sites. Full \$500 scholarships for participation, generously provided through the Department of Defense National Defense Education Program, includes all camp materials, morning snacks, and lunch each day. Transportation is <u>not</u> provided, and please note the camp will take place at the Suncoast Youth Conservation Center all three days. Students are expected to attend each day of camp.

If you should have any questions regarding the experience for your child, please do not hesitate to contact my office. I look forward to sharing in your experiences as your child continues to grow in STEM.

Nicole Tuminella, M.Ed. K-12 STEM Coordinator Hillsborough County Public Schools Nicole.Tuminella@hcps.net 813.272.4408

Program Agenda

Friday, June 2, 2023 8:00am – 4:00pm SYCC 6650 Dickman Rd., Apollo Beach, FL 33572 813.922.7980

Sunday, **June 4, 2023** 9:00am – 4:00pm SYCC 6650 Dickman Rd., Apollo Beach, FL 33572 813.922.7980 Saturday, June 3, 2023 9:00am – 4:00pm SYCC 6650 Dickman Rd., Apollo Beach, FL 33572

813.922.7980



Meet Dr. Tracy Fanara

ENVIRONMENTAL ENGINEER AND RESEARCH SCIENTIST

@InspectorPlanet InspectorPlanet.com

"There's no stereotype too smart. Anyone can be a scientist or engineer with passion and hard work."

- Dr. Tracy Fanara

Dr. Tracy Fanara is on a mission to extend humanity's time on earth through investigation, engineering and education. She an environmental engineer and research scientist with a BS, ME, and PhD from the University of Florida. Tracy spent almost a decade designing water systems around the world, before and during her research at UF, focused on water quality through storm-chasing and sustainable design and habitat restoration. Tracy was the design engineer on two nationally winning EPA design teams, was a National Science Foundation SPICE fellow, and was selected as a US Presidential Management Fellow. Tracy has been recognized as an inspirational woman in STEM by The Weather Channel, Xylem YSI, The Observer, The Gina Davis Foundation: If Then/She Can, Project Inspire, The National Science Leaders of America, and many other organizations, Universities and news outlets for her tireless work in bringing science to the public.

Tracy is a scientist and program manager at the National Oceanic and Atmospheric Administration (NOAA) where she works to protect humans and wildlife by collaborating with scientists and engineers from all over the world to understand and forecast earth systems from the bottom of the sea to the sun. Before joining NOAA, Tracy managed the Environmental Health research program at Mote Marine Laboratory where she was called on as an expert in the Florida Water Crises, where The Weather Channel's Jim Cantore called her, "The face of red tide." Her research projects are diverse from developing citizen science programs, water treatment technology, artificial marine habitats, aquaponics for space travel with NASA, and redeveloped a website (visitbeaches.org), along with developing three apps for publicly available environmental data reporting with over 1.7 million users.

Tracy's mission, Inspector Planet, answers the calls of the public on environmental and wildlife hazards to solve and explain causes and solutions.

Mission: Tampa Bay Girls STEM Camp Summer 2023



June 2-4, 2023, Suncoast Youth Conservation Center

The world is filled with millions of questions that have yet to be answered. This is the first step to building and using a toolkit that will explore Earth's last frontier- the ocean. This three-day immersion program places STEMitists (girls aged 11-14) into teams where together they will plan, prepare and execute their own unique investigation to find out what is happening in Tampa Bay. The camp will start on the water where the girls will use various scientific tools to gather data on their journey to solving real world problems.

Each team of STEMitist will be responsible for collectively researching and gathering evidence to support their answer to a mission question during their expedition. STEMitists will be encouraged to look at each possible source of the problem from different scientific disciplines. During the three days, they will search for clues, analyze samples, and will work to prepare for their final analysis with the tools and knowledge necessary to execute a successful research investigation.

Girls will be separated into groups to investigate a possible cause of a Tampa Bay related environmental problem. In each team the girls will be exposed to:

Engineering and Technology

 The STEMitists will be exposed to building, and concepts of civil and environmental engineering during their investigation throughout the week. They will also be exposed to new technology such as drones, underwater vehicles, and sensors.

Biology

 Biology is the study of life. Life impacts the environment; the environment impacts life. The STEMitists will learn about our diverse Florida biology.

Earth Systems

 Everything is connected. Water and air systems travel throughout the world and the result is "life as we know it". The teams will take a look at these earth systems to decide how they impact Tampa Bay.

Chemistry

Chemistry is all around us and plays an important role in our coastal and land systems.
 The STEMitists will employ chemical analysis during their investigation as they work to solve the problems of Tampa Bay waterways.

Communication

 While the STEMitists are up-close and in the action, they will generate content and documentation. Documentation is critical to every expedition and investigation! The STEMitists will use tools to capture footage that will help their team communicate their findings.

Daily Overview Schedule

June 2nd: Suncoast Youth Conservation Center, 8am - 4pm June 3rd: Suncoast Youth Conservation Center, 9am - 4pm June 4th: Suncoast Youth Conservation Center, 9am - 4pm

Camp Week

Friday, June 2: Welcome & Water (SYCC) • Icebreaker & Overview

• How do we build a better world?

• Investigate our Water (Kayaking-optional)

Observations and Samples

Mission Log

Saturday, June 3: Land (SYCC) Daily Overview

• Topography (Drones)

Bugs & Soil Samples

Test & Analysis

Mission Log

Sunday, June 4: Atmosphere (SYCC) Daily Overview

• Weather Analysis (Pasco Sensors)

• Run-off & Water Treatment

• VIP Presentations- 3pm parents are invited to attend the presentations.

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Parent/Guardian Checklist

Your child is expected to participate in each day of the **2023 Mission: Tampa Bay Girls STEM Camp** and adhere to all district policies, including special safety rules throughout the weekend.
You may contact us at any time during the camp by calling the number provided for the Suncoast Youth Conservation Center or the HCPS Science/STEM Offices.

Steps to Participate:

1) Register at https://all4schools.org/missiontb/

At registration, the students' name, school, grade level and parent's numbers should be provided. Additionally, there will be several documents that will need to be completed and returned via email to Nicole Tuminella (Nicole.Tuminella@hcps.net). Please register by May 19, 2023.

2) Submit required documents to Nicole Tuminella

(Nicole.Tuminella@hcps.net) no later than May 25, 2023.

- HCPS Medical Release Form
- HCPS Media Release
- SYCC Media Release
- SYCC Waiver (if participating in Kayaking)

3) Attend Welcome Meeting on May 24th at 5:30pm via Microsoft Teams (information will be sent in a welcome email)

4) Be on time for camp on Friday, June 2nd at 8am at SYCC!

Please remember the camp will take place over three days at the Suncoast Youth Conservation Center in Apollo Beach.

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FIELD TRIP MEDICAL RELEASE FORM

This form is used for recording parental permission for medical and/or surgical treatment in case of medical concerns on a field trip. A notarized signature is required for an overnight or out-of-state field trip.

Student Name:	School:		
Date of Birth:	Student #:		
Location of Field Trip:	Date(s) of Field Trip:		
As the parent and/or legal guardian of (<i>print student name</i>):			
Parent/Guardian S	Signature Date		
STATE OF FLORIDA, COUNTY OF			
SUBSCRIBED and sworn to before me, a Notary Public	, this, 20		
Signature of Notary:Print Name:			
Medical Insurance Company:	Policy #:		
Student's Address:	•		
Father's Name:			
Business Name (if applicable):			
Mother's Name:			
Business Name (if applicable):			
Family Physician's Name:			
Physician Address (street, city, state):			
Check any health conditions that apply (if none, leave blank). AllergiesAsthmaDiabetesSeizures_			
Heart conditionOther (please describe):			
Medications prescribed:			
Hospital preference:			
NOTE: In the event of an emergency medical situation, the chaperone/teacher will call 911 and all attempts will be made to contact the student's parent/guardian regarding the emergency.			



Student Media Release Form

Da	ate:			
School:				
Student ID Number:				
Student Name:				
Home Address:				
Cit	ty:State:Zip:			
Dear Parent/Guardian:				
ev vic po sp yo	rents. Hillsborough County Public Schools also may wish to interview, photograph, or deotape your child for promotional and educational reasons to utilize in publications, esters, brochures, and newsletters; on the Internet, radio, or television; or for other recial district events. Before your child can participate in any of the above activities, ou must give your permission by signing and returning this media release form to your ild's school.			
	I give my permission for my child to be interviewed, photographed, or videotaped for use in school/district publications, school district productions, or for use on the Internet or by the general news media for print, broadcast, or on websites; and for his/her name to be published in school/district publications, on the Internet, or in news publications or broadcasts. I do not give my permission for my child to be interviewed, photographed, or videotaped for use in school/district publications, or for use by the general news			
	media for print, broadcast, or on websites; nor for his/her name to be published in school/district publications, on the Internet, or in news publications or broadcasts.			
Pa	arent/Guardian signature:			
Parent/Guardian name (please print):				
Date:				





Suncoast Youth Conservation Center 6650 Dickman Rd. Apollo Beach, FL 33572

Please complete and email to Nicole.Tuminella@hcps.net

Student Name:		Date of birth:
Email:		
Address:		
City:	State:	Zip:
Phone:		
Photo Release Florida Youth Conservation Centers Network wishes -to use I am the parent or legal guardian of the minor child named I, the undersigned, consent and agree that Florida Fish and Program/Community Foundation of Tampa Bay, including i Florida Youth Conservation Centers Network, may photograph o I hereby consent to the use, publication or display be Network, any photographs and any reproduction thereof of the portrayed or identified. It is understood that Florida You display such photos, photo reproductions and video or voice promotional or commercial purpose (e.g., website, slide shanews releases). I waive all claims for any compensation for kind arising directly or indirectly out of this activity.	above. Wildlife Conservates employees, age aph my minor chill y or on behalf of Formany video or voice the Conservation C	etion Commission/Tampa Bay Estuary ents and representatives, through the ld with a video camera or digital camera. Florida Youth Conservation Centers ce recordings in which my minor child may Centers Network may use, publish and eof, in whole or in part, for any ewspapers/magazine articles or other
o I do not consent to my child being interviewed, phot Network staff or volunteers.	ographed or filme	ed by Florida Youth Conservation Centers
Signature of Parent or Guardian of Minor		Date





MyFWC.com

2023 Suncoast Youth Conservation Center Assumption of Risk Waiver

Camper's Name:				
I certify that my child is in good health and capable of full participation in the activities of the Suncoast Youth Conservation Camp. I am aware that during wilderness trips and/or instruction courses that my child is participating in under the arrangements of the Florida Youth Conservation Centers Network, certain dangers may occur, including but not limited to physical exertion and contact with water, plants, insects and animal life associated with out-of-doors activities, and travel by automobile or conveyance including canoes and kayaks and any type of labor or practices associated with camper or volunteer programming.				
In consideration of, and as part payment for my participation in s by the Suncoast Youth Conservation Camp, I will and do hereby a Suncoast Youth Conservation Camp, Florida Youth Conservation Commission, the State of Florida and its employees, agents, office liability, actions, causes of actions, debts, claims, demands of eve in my child's connection with his/her participation in the activities	assume all of the above mentioned risks, and will hold the Centers Network or Florida Fish and Wildlife Conservation ers, teachers and volunteers harmless from any and all ery kind and nature whatsoever which may arise from or			
Parent or Guardian Signature	Date			
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