



Tweentech at Stockton University

Friday, January 3, 2025

USC 2 101	Build a Wind-Powered Turbine: Become budding engineers working in teams to design and build wind-powered turbines with their unique blade design. Then test in a wind tunnel and analyze the results to optimize performance with Stockton Technology Integrationist, Michelle Wendt.
Campus Ctr MR 5	Coding Your Sphero Robot: Meet Sphero Bot, an amazing spherical robot that provides endless possibilities for learning and creativity. Users will learn block-based coding to make the robot move, including lights, sounds, sensors, and basic AI, with Stockton Technology Specialist Phil Polsinelli.
Campus Ctr Theater	Crime Scene Investigation: Investigate a crime scene and use evidence to identify the most likely suspect with Stockton Criminal Science Professor Joshua Duntley.
Campus Ctr Event Room	Egg Drop Challenge: Humpty Dumpty needs our help to make a safe getaway from the wall. Design the perfect parachute with Burlington County Institute of Technology Teacher Jackie McGuinness.
USC 1 145 and casting outside USC	Fishing Workshop: Join Dr. Adam Aguiar, an avid fisherman and Professor of Biology, for a tutorial on how marine science research affects the fishing community, with a hands-on casting tutorial and fishing simulation.
Maple Grove	From Sap to Syrup: Learn how Stockton is tapping and collecting sap from the red maple trees at our Maple Grove. The girls will get to taste Stockton's Maple Syrup with Educational Specialist Debby Sommers. Students will walk across the lots surrounding main campus and back: dress to be outside in the cold!
USC 2 225	Lasers and Lissajous Figures: Build a device to display laser figures on the wall. Learn about LASERs and LASER safety with Stockton Professor of Physics, Dr. Joe Trout and Physics Majors.
USC 2 326	Oceans and Climate: Get ready for some hands-on investigation of ocean density layers and melting ice, using tank models of the ocean with Stockton Marine Science Professors, Dr. Anna Pfeiffer-Herbert and Dr. Susanne Moskalski.
USC 1 153	Set Sail with Buoyancy, Density and Gravity: Join Tech Trek alumnae Kiersten Ebersole and Ella Sparks to assemble and test sailboat designs for each scientific principle and the engineering design process in action.
Campus Ctr Event Room	Upcycle STEM Challenge: This open session serves late bus arrivals or early departures. An open format, each table will have all the materials to design an engineering solution (or two) using cardboard tubes, paper cups, marbles, and duct tape, with Stockton Education Professor, Claudine Keenan.
USC 1 245 and Bird Feeders outside USC	Wizardry behind Merlin Sound ID: using AI to identify Birdsong! Join Stockton Birding Club President Breanna Hawkins to read birdsong using sonograms, first the "old-fashioned way" and then using the AI app from Cornell, Merlin. We'll see who can identify key sonogram parts, then put our skills to work in the field.



Tween Tech at Stockton University
Friday, January 3, 2025

Agenda for the Day

Time	Event	Location
8:00 – 8:45am	Arrival, Pre-survey, Name Tags & Welcome Do Now Activity	Bus Drop-off, Campus Center Event Room
9:00 – 10:30am	Workshop 1 Options Students follow Volunteer Guides to Sessions	See details (reverse) USC 1 & 2 exit first towards Grand Hall/Fireplace doors
10:45 – 11:15am	Brunch Time Lunch Food	Campus Center Event Room
11:30 – 1:00pm	Workshop 2 Options (Repeat) Educators to any workshop(s) of their choice	Same locations
1:15 – 2:00pm	Wrap Up (Post-survey and Tech Trek video, forms) Question/Answer cards, STEM Activities	Campus Center Event Room

DO NOW: Make your STEM questions for the day index cards. You can ask questions about what field(s) of study the workshop includes, what careers are related to it, what high school and college classes lead up to it, what % of women are enrolled in those related majors or careers (see samples)→

Session 1: what is the engineering design process?
 Session 2: can you tell me more about some careers in biology?

Girls: please stay with the volunteer holding your Workshop Group sign. If you need to use the restroom, your volunteer or chaperone will walk you (and a friend – always go in pairs) both to and from the restroom. Please put your cell phone away for today, unless your workshop volunteer asks you to use it in the session! Remember to ask your STEM questions for the day in both sessions – they can be the same questions or different ones based on which workshops you plan to attend – the more you ask, the more you learn!

Remembering Dr. Vera King Farris

(July 18, 1938 - November 28, 2009)

A Tribute by Jan Harris, AAUW NJ, Garden State Branch Member



The late Dr. Vera King Farris was the third president of Stockton who served for 20-years from 1983 until her retirement in 2003. A distinguished woman scientist, President Emerita Farris became the first female African-American president of a New Jersey public college, and one of the first in the nation.

Dr. Farris was a native of Atlantic City, New Jersey and attended Atlantic City High School, graduating third in the class of 1954. She earned a biology degree from Tuskegee University in 1959. She later earned master and doctorate degrees in zoology from the University of Massachusetts Amherst. She held administrative and teaching positions at the State University of New York at Stony Brook and Brockport, and the University of Michigan. Dr. Farris returned home to New Jersey to become Vice President for Academic Affairs at Kean University in Union before leading Stockton to become nationally ranked, more diverse, and a more beautiful campus.

How proud Dr. Vera King Farris would be to know that in the tradition of AAUW New Jersey’s own highly successful Tween Tech program for high school girls, members of the Atlantic and Cape May branches are holding annual Tween Tech events for 6th – 8th grade girls. As Tween Tech stimulates and inspires the interests of middle school girls in STEM, Dr. Farris’ spirit will certainly be with this innovative program on the campus of her beloved Stockton University, in the company of girls from her Atlantic City district and its neighboring schools of southern New Jersey.