

Virtual Tech Trek 2024

STEMINISTS LEADING THE WAY!

Sponsored by **25** AMAZING CA branches and the generosity of



Mary "Dr. Mimi" Isaac and Terra Lee

Camp co-Directors Techtrek-virtual@aauw-ca.org





Program Overview

Virtual Tech Trek Camp 2024 begins with Orientation on Sunday at 4:30, a 90 minute session for campers and coaches where we discuss the schedule and expectations regarding attendance & participation and complete team introductions in breakout groups.

From 7:30-9, campers may return for optional* activities including opening and closing campfires, and the evening workshops. (*Note two evening workshops are required during the six evenings.)

Camp begins promptly on Monday at 9 am and ends at either 5 or 9 PM each day, depending on whether you signed up for an evening workshop.

REQUIRED: Orientation and all morning sessions, Inspiration Hours, and afternoon workshops each day (ends 5 PM, total eight workshops), plus two of the optional evening workshops (out of the six).

For evening workshops, only two are required, but you may attend all and receive a Super STEMinist certificate.

- Kits will be distributed in early July for campers and coaches.
- Branches will deliver or arrange for kit pickup before July 9 for coaches, and the week before camp for campers, i.e. during the week of July 14.
- CAMPERS: Other than checking that everything is there, please do not open kits! Here is a <u>packing list</u> with what you should have.
- Check CampDoc REGULARLY for updated forms and camp information:
 - Each camper will receive a wristband flash drive with activity instructions and resources.
 - Updated resources will be available <u>HERE</u> for viewing and download.



Tech Trek 2024:



SCHEDULE



Day	Time	Session	7/21- 7/26/2024 <u>Camp Links</u>		
Tu – 7/09	12:30-4:00 pm	STEM Lingo Workshop Training	STEM LINGO		
Th – 7/11	<mark>6:30-8:00 pm</mark>	All Virtual Coach Training	BST Registration		
Sunday 7/21	<mark>4:30-6 pm</mark>	Orientation	Daily Registration		
	<mark>7:30-9 pm</mark>	Opening Campfire (OPTIONAL)			
M-F	<mark>9 am - 12 pm</mark>	Inventing a Sustainable Future			
M-TH	<mark>12:30 - 5 pm</mark>	Inspiration Hour and PM Workshops			
M-TH	<mark>7:30-9:00 pm</mark>	Evening Workshops			
Friday	<mark>12:30-3:30 pm</mark>	Call to Action and Camp Showcase			
Friday	<mark>7:30-9:00 pm</mark>	Closing Campfire (OPTIONAL)	Ļ		

ZOOM REGISTRATIONS ARE NOT AUTOMATICALLY APPROVED FOR ORIENTATION AND CAMP SESSIONS

Sign up for camp Zoom links at least 24 hours in advance to receive approval in time!



Schedule



Tech Trek 2024 Orientation				
Sunday				
Time	Activity			
4:30-4:35	Welcome to Tech Trek			
4:35-4:40	Welcome to reen men			
4:40-4:45	-			
4:45-4:50	Camp Fundamentals: Kits, Schedule, etc.			
4:50-4:55	-			
4:55-5:00				
5:00-5:05				
5:05-5:10				
5:10-5:15	Introducing Innovation and SDGs			
5:15-5:20				
5:20-5:25				
5:25-5:30				
5:30-5:35				
5:35-5:40				
5:40-5:45				
5:45-5:50	Breakout Groups Intros			
5:50-5:55				
5:50-6:00				
6-7:30	Dinner with family			
7:30-7:40	•,			
7:40-7:50				
7:50-8:00				
8:00-8:10				
8:10-8:20	Opening Campfire			
8:20-8:30	<u>OPTIONAL</u>			
8:30-8:40				
8:40-8:50				
8:50-9:00				

Schedule Legend				
Instructor Lead				
Social Coach Lead Build Coach Lead				
Workshop Presenter + Workshop Coaches				
All Coaches				
Speaker				

	Tech Trek - Inventing a Sustainable Future AM				
	Monday	Tuesday	Wednesday	Thursday	Friday
Time	Activity	Activity	Activity	Activity	Activity
9:00-9:05	Welcome				
9:05-9:10	Welcome	Welcome and Review	Welcome and Review	Welcome and Discussion	Welcome and Review
9:10-9:15				of Wearable Tech Build	
9:15-9:20	Sunday Recap and Morning Overview				<u>Presentation Prep</u> and Troubleshooting <u>Example Presentation Videos</u>
9:20-9:25		LED Blink Activity			
9:25-9:30 9:30-9:35			Strengths, Interests, and Values		
9:35-9:40				Device Construction Step 4: Artistic Design, Hardware, Code	
9:40-9:45	Sustainability	LED Blink			
9:45-9:50					
9:50-9:55					
9:55-10:00		Intro to Servos	Engineering Design		
10:00-10:05	Team Name and	Positional and Continuous	Process		
10:05-10:10	Sustainable Goals		Optional Video		
10:10-10:15	Handa on Activition	Working with Servos			
10:15-10:20 10:20-10:25	Hands-on Activities Hardware Kits	Positional and Continuous			
10:25-10:25					
10:30-10:35	BREAK	BREAK	BREAK	BREAK	BREAK
10:35-10:40					
10:40-10:45		Programming Two Servos			
10:45-10:50	Intro to Arduinos		Automated Wearable Device Project Steps 1, 2, & 3	Continue Device Construction Step 5: Test Your Design	Decomposition December and
10:50-10:55					
10:55-11:00					
11:00-11:05	Circuitry Basic and	Intro LEDs and Servos			
11:05-11:10	Schematics				
11:10-11:15 11:15-11:20	(LED Circuit)				Presentation Prep and Troubleshooting
11:20-11:25					Troubleshooting
11:25-11:30	Arduino IDE,			Device Construction Step 6: Improve Your	
11:30-11:35	Microcontroller Drogramming Structure	LEDs and Servos	Device Construction Step 4 <u>Review Templates</u>	Design	
11:35-11:40	Programming Structure, Comments		and Construct a Device	Dosign	
11:40-11:45	Comments				
11:45-11:50	Hardware Q&A	What Will I Be?			
11:50-11:55					
11:55-12:00	BREAK FOR LUNCH	BREAK FOR LUNCH	BREAK FOR LUNCH	BREAK FOR LUNCH	BREAK FOR LUNCH

	Tech Trek 2024 Schedule Afternoon					
	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>	
Time	Activity	Activity	Activity	Activity	Activity	
12:30-12:40 12:40-12:50 12:50-1:00 1:00-1:10	INSPIRATION HOUR Taviare Hawkins	INSPIRATION HOUR Shoko Sakai	INSPIRATION HOUR Eileen Velez-Vega	INSPIRATION HOUR Sara Schonour	TREKKERS MAKING A DIFFERENCE Terra Lee	
1:10-1:20 1:20-1:30	Q & A	Q & A	Q & A	Q & A		
1:30-1:40 1:40-1:50	Speaker Debrief/Discussion	Speaker Debrief/Discussion	Speaker Debrief/Discussion	Speaker Debrief/Discussion	Q & A	
1:50-2:00 2:00-2:10 2:10-2:20 2:20-2:30 2:30-2:40 2:40-2:50 2:50-3:00 3:00-3:10 3:10-3:20	Science Exploring Water at <u>Its Surface</u> Mickey Sarquis	Technology Lights, Waves, and <u>Plasma, Oh My!</u> Kathreen Thome	Engineering Blowing in the <u>Wind</u> Heide Doss	Math <u>The Magic of Paper</u> Amy Anderson	camp showcase: STEMinists	
3:20-3:30	Break	Break	Break	Break	leading the	
3:30-3:40 3:40-3:50 3:50-4:00 4:00-4:10 4:10-4:20 4:20-4:30 4:30-4:40 4:40-4:50 4:50-5:00	Science <u>Strawberries Have</u> <u>DNA?</u> Amanda McQuade	Technology <u>STEM Lingo</u> TBD	Engineering <u>Twinkle, Twinkle</u> <u>Little Star,</u> <u>Power=l²R</u> Lisa Will	<i>Math</i> <u>Math is on the Menu</u> <i>Craig Couture</i>	Leading the Way!	

	Tech Trek 2024 Schedule Evening					
	Monday	Tuesday	Wednesday	<u>Thursday</u>	Friday	
Time	Activity	Activity	Activity	Activity	Activity	
7:30-7:40 7:40-7:50 8:00-8:10 8:10-8:20 8:20-8:30 8:30-8:40 8:40-8:50 8:50-9:00	Science <mark>Raise Your Hands,</mark> <u>Raise Your Voices</u> <i>Mary Isaac</i>	<i>Technology</i> <u>Touring a Tokamak</u> Kathreen Thome	Engineering Engineering a Pathway to MANY Opportunities Kimberly Rogge-Obando	<i>Math</i> <u>Leading Into the</u> <u>Future</u> Dr. Tracy Nguyen	Closing Campfire OPTIONAL Online Escape Room	