

2023 STEAM Conference

SATURDAY, MAY 20, 2023 SOUTH PUGET SOUND COMMUNITY COLLEGE

SCIENCE, TECHNOLOGY,
ENGINEERING, ART & MATH
CONFERENCE FOR FEMALE
IDENTIFIED AND GENDER
NON-CONFORMING
STUDENTS IN THE
6TH, 7TH & 8TH GRADE



KEYNOTE SPEAKER

Courtney Jarmon Originally from Chicago, in middle school Courtney dreamed of flying in space. She started flying airplanes at 14 and by age 18 she was a flight instructor. After attending Saint Louis University and receiving a Bachelor of Science in Aeronautics, she received a Master's Degree in Space Studies. She enlisted in the US Airforce and became a Captain, and went on to teach new pilots to fly C-130s. She deployed three times to Iraq, Kuwait, and Afghanistan. Today Courtney is a 6th grade science teacher in Olympia, Washington. This is the story of how she went from a space nerd to a combat aviator, to a middle school science teacher.

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THANKS TO OUR ORGANIZING COMMITTEE

Nancy Deakins, Chloe Dan, Wendy Goodwin, Kelly Green, Joy Hobbs, Christine Hoffmann, Shruthi Lingam Nattamai, Katya Miltimore (chair), Kylie Phillips, Meena Somasundaram, Lauren Troyer

The School District does not sponsor this event and assumes no responsibility for it.



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WORKSHOPS

2023 Workshop Schedule	
TIME	ACTIVITY
9:00 - 9:30	Check-in/Registration (Student Union, Bldg. 27)
9:30 - 9:50	Opening Ceremonies (Student Union, Bldg. 27)
10:00 - 10:50	Workshop 1 (Various)
11:00 - 11:50	Workshop 2 (Various)
12:00 - 12:30	Break and Lunch (Student Union, Bldg. 27)
12:40 - 1:30	Workshop 3 (Various)
1:40 - 2:10	Keynote Presentation by Courtney Jarmon, Wrap-up and Prizes (Student Union Building 27)
Pick-up 2:10	Please pick up your student (Student Union, Bldg. 27)

CLASS LIST

Please visit the registration site for descriptive class lists for each of the three workshop sessions.

Parents in Classrooms

We aim to minimize all distractions in the classrooms; we also ensure all adults in the workshops have gone through background checks. Parents who wish to stay on campus during the conference should plan to attend the Parent Workshop. *If a parent needs to accompany their children in the workshops, we ask that they receive advanced permission from organizers.*

REGISTRATION INFORMATION

Online Pre-Registration is **REQUIRED** for both students and parents. Register and pay via credit card at www.thurstonEYH.org

Registration Deadline:

Monday, May 12, 2023

Register as soon as possible, student and parent workshops fill up on a first come, first serve basis.

We will do our best to honor your workshop requests, but since this is not always possible, you may have a totally unexpected opportunity.

There will be no on-site registration.

Confirmation will be made by email only.

Fees

Conference Fee - \$15

Includes all materials, an information packet, a conference t-shirt, and a light lunch

Due to the size and nature of this event we are unable to accommodate dietary restrictions. Please bring an alternative lunch if necessary.

All fees are non-refundable.

Scholarships are readily available thanks to funding from our sponsors, please see the registration site for more information.

Image Release

Photo and video will be taken during the conference. These materials may be used for promotional purposes. Please contact our co-chairs if you have any concerns.

Conference print materials designed by Jenny Zenkner

CONTACT INFORMATION

For special accommodations, questions or concerns please email our co-chairs at chair@thurstonEYH.org

For day of event contact, please call our chair:

Katya Miltimore at **(360) 550-8511**

Ongoing Information and Updates

Web: www.thurstonEYH.org

Email: info@thurstonEYH.org

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www.facebook.com/ThurstonEYH

EYH 2023 Workshop Catalogue

Group A		Group B		Group C	
A-1	<p>A Breath of Fresh Air - Weather, Air Quality and You <i>Odella Handley, Senior Air Monitoring Specialist & Nancy Wood-Siglin, Air Quality Specialist, Olympic Regional Clean Air Agency</i></p> <p>What is air pollution and where does it come from? Think you know? You might be surprised! We will also learn how weather affects air quality and what you can do right now to keep your air clean.</p>	B-1	<p>Aerial Mapping Using Drones <i>Keisha Chinn, Environmental Information Program Manager, Washington State Dept of Transportation (WSDOT)</i></p> <p>Come learn more about drones and how they can be used for environmental planning and monitoring of wetlands, stream restoration, salmon runs, natural hazards, and much more! Explore the use of aerial data to make 2D and 3D maps and models using Global Positioning Systems (GPS) and Geographic Information Systems (GIS).</p>	C-1	<p>Disease Detectives <i>Elisabeth Long, Epidemiologist, Washington State Department of Health</i></p> <p>Do you like a good mystery? Well, an epidemiologist's job is all about solving mysteries. Instead of figuring out "who did it" like a police detective would, they figure out "what caused it." Come use your critical thinking and logic to investigate what it takes to protect the public's health and track down an outbreak.</p>
A-2	<p>Test Flights: An Introduction to Aerodynamics <i>Courtney Jamon & Lauren Troyer, Science Teachers, Olympia School District</i></p> <p>Learn how airplanes fly, the four forces of flight, and how the shape of the wing impacts flight performance. Then pick a wing design to build and test. Discover which design does the best and compare that to what happens in real life.</p>	B-2	<p>Hiring! Shellfish Farm Managers <i>Mary Elizabeth Bissel, Education Outreach Manager & Aimee Christy, Shellfish Biologist, Pacific Shellfish Institute</i></p> <p>Washington produces more oysters than any other state! Do you have what it takes to grow shellfish? Pacific Shellfish Institute invites you to try your hand at shellfish farming – from producing shellfish seed in the hatchery to growing them out on the beach! View baby oyster larvae and plankton under microscopes, sieve seed, set up various types of oyster grow-out methods, tie bowline knots, and prepare your product for sale.</p>	C-2	<p>Eyes Under Puget Sound <i>Sandra Weakland, Benthic Ecologist, Washington State Department of Ecology</i></p> <p>Ever wonder what types of creepy crawlies lurk in the mud beneath the waters of Puget Sound? Learn how marine scientists collect and identify these fascinating marine invertebrates. Use a microscope and get up close and personal with worms, sea stars, clams, crabs and more!</p>
A-3	<p>Invest to Impress! <i>Amanda Stevens, Foundation and Education Development Manager, TwinStar Credit Union</i></p> <p>Ever dreamed of being rich? How do you get there? In this session we will be looking at the importance of not only long-term saving, but also how investing can be a tool to help build your wealth. Learn about savings, CD's, bonds as well as get an introduction to the stock market.</p>	B-3	<p>Mighty Microbes <i>Megan Feuk, Lead Water Quality Analyst; Michelle Barnett, Senior Construction Mgr; Terri Prather, Operations and Facilities Dir; Faith Rasmussen, Water Quality Analyst I; Tricia Swinyer, Environmental Educator; LOTT Clean Water</i></p> <p>Join us for a fun workshop about how the LOTT Clean Water Alliance cleans and recycles wastewater. Women working at the treatment plant will talk about their clean water jobs and how they got started in their career. Then put on your lab coat and gloves for a hands-on microscope lab to see some cool microorganisms up close! If you're lucky maybe you'll find a tardigrade.</p>	C-3	<p>BIM & 3D Modeling in Construction <i>Jessie Robertson, BIM Manager, FORMA Construction</i></p> <p>Remember playing with LEGO®s as a little kid? Maybe you still do! In this workshop we'll be using LEGO® Bricks to learn how to use 2D Drawings and 3D models to construct buildings.</p>
A-4	<p>Trash your Trash for Clean Water <i>A. D'Andra Buchanan, Civil Engineer, City of Lakewood</i></p> <p>Rainfall, snow and water all come down from the sky and get swept away down drains and pipes which also includes the trash we see on the side of the road! That can affect the water you drink and the water quality for life in the Puget Sound. Get your hands clean by figuring out how to clean water and then test your own design to see if your dirty water is the cleanest of the class.</p>	B-4	<p>The Elements Behind Nature's Dark Art <i>Kayla Duran, Site-Based Program Manager, Big Brothers Big Sisters of Southwest Washington</i></p> <p>Come learn the science behind nature's dark art of cyanotype (also known as sun prints) with Big Brothers Big Sisters of Southwest Washington. Spend some time enjoying the sun while using science to create art with nature!</p>	C-4	<p>Spark the Heart <i>Cori Spotts, Firefighter/Paramedic, Lacey Fire District 3</i></p> <p>Can you revive a dead heart? Use CPR and the latest emergency medical tools to treat a cardiac arrest. Learn how an Automatic External Defibrillator (AED) works, and practice saving a life.</p>
A-5	<p>Strong Girls = Strong World <i>Kristen Rubis, Owner, Yoga 4 Teens</i></p> <p>Do you get stressed out? Do you have daily calming practices to support you? Yoga 4 Teens can help! We will share in art and an opening circle; followed by meditation and breath work with sound healing chimes, gentle yoga and other self care tools to support you so you can feel grounded and empowered. This time together will deepen your unique character and help you cultivate confidence so you can walk through this world in a more empowered way. Teen Power Rocks!</p>	B-5	<p>You Just Won \$10,000! <i>Crystal Wright, Former Financial Examiner</i></p> <p>If you just won \$10,000, what would you do with it? What is \$10,000 really worth anyway? No matter how old you are or how much you have, it is important to know how to manage your money. Come join us as we talk about how we can use money to meet our day to day needs AND make our future goals come to life!</p>	C-5	<p>Game-ified Math And Physics <i>Sara Rose, Adjunct Faculty Physics/Math/IBEST & Jingyi You, Math Professor, South Puget Sound Community College</i></p> <p>Work out with your brain with math and physics games! The concepts of motion and geometric graphing are the focus of this fun in-lab time with a math and a physics professor. Let's swell those brain muscles and improve our brain power.</p>
A-6	<p>It's a Lifesize Puzzle About the Past! <i>Jessica Delgado-Morris, Archaeologist, Aqua Terra Cultural Resource Consultants</i></p> <p>How do Archaeologists learn about past cultures? What does it mean when we find objects from the past and what does it mean to put the puzzle pieces together? Come do a real survey with us and play with ceramics to find out!</p>	B-6	<p>What's a Medical Adjudicator? <i>Dea Lindsey, Medical Adjudicator, DSHS/Social Security Administration</i></p> <p>Learn how science helps government in the realm of healthcare including the study of disease and it's impact on your body and ability to work.</p>		