

Hands-on Student Workshops Morning Sessions (choose 3)



Build Your Own E-card!

Kat Ray, Software Engineer, Yahara Software

What is a website made of? How do lines of code translate into actual words, images, and actions on a screen? In this workshop, you will learn the basics of web programming while creating our own e-card using HTML, CSS, and JavaScript.

The Colors We Eat: Analyzing the Interactions of Light and Molecules

Dr. Kimberly Naber, Lecturer, Chemistry Department, UW-Whitewater

The foods that we eat are a rainbow of colors. You will explore the interaction of light with molecules and find out how you see different colors. You will explore an instrument that unscrambles the light to help us measure different colored molecules found in your food.

Encryption with Secret Codes

Laurie Salvail, Curriculum Development Specialist with CYBER.ORG

If you love secret codes, then this is the workshop for you! Explore cryptography using nothing more than paper, tape, and a Pringles can! Create your own Caesar Cipher and Enigma machine to encrypt and decrypt messages - chips included! Join us as we make and learn about real life secret codes.

Engineer a Cell Phone Stand

Angela Weier, Nuclear Design Engineer at SHINE Technologies

A cell phone stand is one product that might seem very simple, but a lot of thought needs to go into designing one, making it a great engineering design project. In our session, we will design, build, and test a cell phone stand that you can take home.

Go, Robot, Go!

Laura Masbruch and the Women of Ferradermis

Learn the skills it takes to design, build, code, wire, and drive a robot. Work with girls from the Ferradermis FIRST Robotics Team from Whitewater High School to get hands-on experience soldering and wiring, designing and assembling parts for a robot, programming a robot, and then driving a robot built by the team.

Surgical Intern for a Day

Dr. Christine Chuppa, Dr. Molly Larson, Dr. Elizabeth Lynk
Center for Women's Health, Fort HealthCare

In this workshop with "a peel", you will scrub and gown up for surgery, place sutures on a banana, and perform a local injection and biopsy of an orange. You will learn sterile technique and surgical skills under the guidance of Dr. Christine Chuppa, Dr. Molly Larson, and Dr. Elizabeth Lynk, who are physicians at Fort HealthCare Center for Women's Health. Join us for an up-close and revealing peek into the world of medicine.

The Race to Action: How Pills Dissolve in your Stomach!

Dr. Sarah Pagenkopf, Director of Pharmacy, Fort HealthCare
Dr. Courtney DeKeyser, Post-Graduate Year 1 Pharmacy Resident, Fort HealthCare

In this workshop, we will look at how pharmacists and engineers find out how long different types of pills take to be absorbed into our bodies. This knowledge is very important for making medical decisions. Participants will perform trials on different types of pills, and learn about pharmaceutical research.

The Science behind the Food You Eat

Terri Borneman, Director of Quality Assurance, Jones Dairy Farm

Explore the chemistry occurring in the foods that you eat! Learn the science behind how chemical reactions occur every day in food ranging from the ripening process to how ingredients interact when cooled or heated. Be a chemist and use testing methods to determine the properties of food. You will test for allergens in food and on equipment.

Tiny Earth – An Underground Search for Antibiotics

Dr. Heather Pelzel, Associate Professor of Biological Sciences, UW-Whitewater

Increasing antibiotic resistant infections are a major global health challenge, but Tiny Earth researchers can provide part of the solution. Tiny Earth is an international network of instructors and students who are searching the world's soil in pursuit of new antibiotic-producing bacteria. Become part of the Tiny Earth team and learn the lab techniques needed to isolate and identify antibiotic producing bacteria.

Wear Your Genes!

Dr. Kirsten Crossgrove, Genetics and Molecular Biology, UW-Whitewater

Get to see your genetic material! In this session, you will extract DNA (deoxyribonucleic acid) from your own cheek cells and watch it form visible white strands as it precipitates out of a solution. You will then collect it in a tube that you'll use to make a necklace that you can take home. Along the way, you'll learn about the beauty of the DNA structure and how its structure relates to its function. Note: Depending on the level of COVID community transmission at the time of the workshop, DNA may be extracted from strawberries instead of cheek cells.

What Can Glowing Animals Teach Us?

Dr. Kris Curran, Professor, Department of Biological Sciences, UW-Whitewater

Have you ever watched fireflies make light at night? Do you know that some jellyfish glow under a black light? We will investigate the difference between bioluminescence and fluorescence and think about how living organisms make and use light to survive. You will see how researchers use this knowledge to answer biological questions.

Plasma Physics: What It Takes to Make a Star in a Jar!

Carolyn Schaefer, Rachel Sassella, Jill Peery, Molly Aslin, Louise Ferris, and Kelly Garcia, graduate students in Plasma Physics, UW-Madison

You've heard of solids, liquids, and gases, but have you heard of plasma? Plasma is the fourth (and hottest!) state of matter. It's like a hot gas that contains charged particles, and it makes up over 99% of the visible universe - including all the stars! It is also the material required to make fusion energy on Earth, which would provide clean energy for the future of humanity for thousands of years. You will learn about plasmas by building your own electric motor, experimenting with a plasma ball, and making your own spectroscope.

Parent Information Panels Morning Sessions (choose 2)

How Can Parents Help: Communicating with Teens

Brian Bredeson, Career Development Center, UW-Whitewater
Erin Adams, sophomore, UW-Whitewater
Kyla Smith, senior, UW-Whitewater
Taylor Wedge, senior at UW-Whitewater

Help your daughter discern what to do with her future. Brian Bredeson, Director of Career Services at UW-Whitewater, and a panel of undergraduate women will discuss how to have conversations with your daughter about career choices and how to implement those choices.

Let's Talk about College Admissions and Financial Aid

Sarah Duesterbeck, Admissions Counselor, UW-Whitewater
Shirley Butler, Senior Financial Aid Officer, UW-Whitewater

Answers to your questions about the college application process. Information about options and opportunities to make higher education more affordable.

Making the Right Choice: Other Post-High School Educational Opportunities

Bobbi Bishofberger, MATT Division Chair & Welding Instructor, Blackhawk Technical College
Katie Blanchard, Recruitment Coordinator, Madison College
Kevon Fansler, US Navy Recruiter

Selecting post-high school education can be daunting: apprentice programs, technical schools, military options. Get the inside scoop on how to help your student make a good decision based on their educational needs and career aspirations.

Learn how AAUW Empowers Women and Girls

AAUW-Fort Atkinson and AAUW-Janesville branch members

Learn how AAUW empowers women and girls through programs, scholarships, public policy, and more. Find out how you can get involved in local branches of this national organization.

Afternoon Programs

(Everyone attends the keynote address and panel)

Keynote

Putting on a Show: The Intersection of Science and Art

Ruth Conrad-Proulx, Production Manager, Technical Director, and Lecturer, Theatre & Dance Department, UW-Whitewater

Have you ever wondered how the magic of theatre is created? Without science and math, theatre magic wouldn't be so magical. Everything we do is grounded in science and math — from the construction of scenery, the photometrics of lighting, and the measurement of sound waves, to how fabric moves when draped on an actor. Applying science and math enriches the arts and makes exciting theatre possible and more understandable.

Panel: Stories and Secrets from Women in STEM Careers

Dr. Luella Guzman, Pediatrician, Fort HealthCare
Emily Jackson, Project Engineer, JT Engineering, Inc.
Brittany Noe, Project Manager, Integrated Process Engineers & Constructors

Opportunities abound for women in STEM careers. Learn about careers you might not know about, and how women are breaking through the barriers that once existed, to excel in exciting and rewarding careers.