

Registration Info

NEW THIS YEAR: Quick and easy online registration!

Go to our website, www.ce.uwc.edu/waukesha/catalog/ choose the "Youth Learning" category, then select "GEMS" from the class choices and follow the steps to select workshops and to complete payment and required youth forms.

Girls MUST be between the ages of 11-14. This program is primarily funded by sponsors and all workshops are held by professional specialists who are volunteering their services for the day to specifically engage this age range in the STEM fields. Because of this, unfortunately, if your daughter is "almost" 11 years, she will need to wait to join our GEMS until next year.

Each year, we strive to encourage young girls to pursue their interests in STEM fields by presenting them with the opportunity to speak to and learn from those who have already attained success in their field. We hope to present them with the opportunity to make connections with new people and those like-minded individuals to encourage friendships and personal connections. For this reason, we are unable to honor requests for girls to be put in the same workshops as a friend.

Each workshop has a maximum seat capacity so you will want to register early before the spots are taken! All attendees will receive an email confirmation prior to April 7th, which will include their workshop assignments and day of schedule. Changes to workshops cannot be made once they are confirmed. Please note: we reserve the right to change workshops choices in order to accommodate fluctuations in workshops/program needs.

To secure your student's spot in this conference, please register online at www.ce.uwc.edu/waukesha/catalog/

A BIG thank you to our 2018 Sponsors!

\$ 150 Bronze Sponsorship:



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\$ 500 Silver Sponsorship:

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\$ 1,000 Gold Sponsorship:



Workshop Sponsorship:



A big thanks to our AAUW West Suburban Milwaukee Chapter for assisting us for our 2018 GEMS program and sponsorship for three girls to attend this conference.

Questions?

We're happy to help!

www.waukesha.uwc.edu/ce

262-521-5460

email: wakce@uwc.edu

UW Waukesha is proud to bring you our 10th Annual GEMS Conference for girls ages 11-14

Saturday, April 7,
2018

9:00am-3:30pm

Join us for a great day with.....

....exciting workshops

....fun prizes

....a student panel

....a parent session

....a special luncheon

....and so much more!



SOUTHEAST REGION

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Girls' Schedule of Events

8:00-8:45 am	Check-in at UW Waukesha
9:00-10:15 am	Welcome Presentation
10:25-11:15 am	Session I
11:25 am-12:15 pm	Session II
12:15-1:20 pm	Lunch
1:30-2:20pm	Session III
2:30-3:20pm	Session IV
3:20-3:30pm	Wrap-up and pick-up

During the welcome presentation, girls will have the opportunity to ask current college students any questions they may have! All of our student panel participants are college students attending local schools in our area. Our student panelists will reveal some valuable tips and tricks for being a successful college student! Find out what other students have done to apply to college, how they set up their class schedule, if they work, if they live at home, and anything else you can think of to ask!

Parent Program

9:00-10:15 am	Welcome Presentation with girls
10:15-11:00 am	College Prep 101 with Millie Wenzel
11:00-11:45 am	TBD

This year, the parent program will discuss higher education options, a suggested timeline for college preparation, what your student can do now and throughout high school, and how to apply for scholarships. We'll talk about all of that! During the 2017 GEMS Parent Program, we had a police officer from the Waukesha County Police Department come and give a talk about "How to Keep Your Teens Safe Online". This spring we are working on another great discussion about teen safety! More information to come soon!

Please RSVP for this learning opportunity by registering online for the "Parent Program" under "GEMS".

Workshops

- 1. Build a Better Bracelet Assembly Line**
The G.E.M.S. Bracelet Factory is behind schedule and you need to figure out how to improve the process to meet the schedule. You will analyze the current process and brainstorm improvements. Run trials using your ideas to improve the time it takes to make the bracelets. Once your ideas are fine-tuned we will run a trial to see if you are able to get the Factory back on schedule. Discover how Industrial Engineers problem solve and make everything from factories to lines at amusement parks better.
- 2. What's in Wisconsin's Woods?**
Come learn about how wildlife researchers track and monitor wildlife here in Wisconsin! Join scientists from the Wisconsin DNR's Snapshot Wisconsin project. Learn how they are using a statewide network of trail cameras to gather exciting information about Wisconsin wildlife. You'll get a chance to set up a trail camera and practice your wildlife identification skills!
- 3. Power-Up Girls! Empowerment Workshop**
Life is difficult with so many stresses in our daily lives! Often times, we just start to feel confident, and all of a sudden, more things get piled on and we find ourselves completely stressed out! We will discuss self-awareness, self-management, social awareness, relationship skills, and responsible decision-making through fun activities such as role-playing, mindfulness, singing, and creating a peace mural.
- 4. Inside the Food Lab: Research & Development**
Bars, bars, bars! Consumers eat granola bars and protein bars throughout the day for snacking or as part of a meal. Why are some gooey and others crunchy? How does it stay together? Learn about the ingredients that go into a bar, what a "binder" is and then create and taste your own! *Please note that materials used may contain nut allergens.*
- 5. Squishy Circuits**
"It's alive! Mua-ha-ha!" Did you know that electricity flows through many different things? Learn how to create a simple circuit out of insulated and conductive play dough, then connect your creation to a battery and watch it light up with an LED bulb!
- 6. What's in a Game?**
Life's a game! No, really... everything we do is based on human tendencies and set rules, just like in a game. Join us to understand how you can analyze simple and complex games using just math. How do you know if a game rigged? How can you optimize your strategy to win? We will take a look at some popular games to answer these questions.
- 7. "Eye" am One of a Kind!**
Got your eye on a future career in biology? In this lab, you will learn all about the amazing complexity of the human eye. Just like you, no two eyes are alike! You will be able to use instruments used to test and examine the eye- even put on some gloves and dissect your own bovine eye!

8. Egg Projected Structure Challenge

How far do you think you can extend an egg from the wall using only string, paper, and masking tape? Join the American Society of Civil Engineers and learn about how projected structures (or "cantilevers") work in bridges and buildings around you! Then, use your new skills and knowledge to build a projected structure of your own and see how far you can project an egg from the wall!

9. Get PSYCHed!

Interested in learning more about the inner workings of the human brain? Our memories are central to who we are and how we interact with others. Dive deeper into topics such as memory alteration, déjà vu, and false memories. We'll challenge what you think you know about memories. Had any weird dreams lately? Let's see if we can find out why through dream analysis! Wondering what else there is to psychology? Come learn about the diversity within our field!

10. Robotics Challenge

You'll learn to program a robot to perform specific tasks. Each task accomplished will earn you points. At the end of the hour, we'll add up the points- and the winner gets bragging rights for the day. Each student will have their own wireless robot to work with and programming is done with an easy-to-understand computer programming language.

11. Lizards, Snakes, Amphibians, Oh My!

What makes an amphibian different from a reptile? What are the different types or groups of reptiles? Come prepared to bust myths and misinformation about these misunderstood animals, and learn all about the diversity of reptiles, what they eat, where they live, how they defend themselves, and much more!

12. I'm the Map!

Dora may be old news, but young women everywhere are just getting their boots wet exploring careers in environmental science and mapping. Come join Cardno scientists for a fun learning experience highlighting where science-based degrees can take you! This workshop is a Geographical Information System (GIS) based workshop where students will have the opportunity to learn about and collect environmental field data and then create a map of their work using ArcGIS software.

13. A Look Inside the Bovine Hide

Ever wonder what a cow heart feels like? How about lungs? Slip on a pair of exam gloves and palpate your way through these plus more fresh cow organs. Learn why cows give milk with hands on reproductive tract examination and dissection. View jars containing interesting livestock parasites and an abnormal baby pig. If you are interested in veterinary science, this workshop is for you!

14. Make a Website!

Ever wonder what goes on behind the scenes of your favorite websites? In this workshop we will explore the basic languages of the World Wide Web. Then you will create your very own website that will be available at waukesha-gems.com.