

Registration Info

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, follow the steps to select workshops and to complete payment and required youth forms.

Each year, we strive to encourage young girls to pursue their interests in STEM fields by presenting them with the opportunity to speak with and learn from those who have attained success in their field. They will have 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.

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.

Keynote Speaker Spotlight:

Andrea Bequest is a physician assistant working in internal medicine at the Medical College of Wisconsin and Froedtert Hospital. She graduated from Carroll University with a biology and biochemistry degree in 2009 and went on to complete Physician Assistant School at Marquette University in 2012. She has been working as a PA for 6 years. Prior to working at Froedtert Hospital, she worked in an outpatient internal medicine clinic and at Columbia St. Mary's Hospital. Her passion is education of future physician assistants and she precepts several PA students from area programs around Wisconsin each year. She is a member of American Association of University Women, advocating for women's education, especially in STEM fields.



A BIG thank you to our 2019 Sponsors!

\$150 Bronze Sponsorship:



\$1,000 Gold Sponsorship:



Workshop Sponsorship:



OCEAN CONNECTIONS



Engineering • Robotics • Computer Programming



A big thanks to our AAUW West Suburban Milwaukee Chapter for assisting us for our 2019 GEMS program and sponsorship for six girls to attend this conference.



Questions?

We're happy to help!
www.waukesha.uwc.edu/ce
262-521-5460
email: wakce@uwc.edu

UWM at Waukesha is proud to bring you our 11th Annual



Girls: Engineering, Mathematics & Science

Conference for girls ages 11-14

Saturday, May 4, 2019

8:30am-3:00pm

Join us for a great day full of:

- exciting workshops
- fun prizes
- a parent session
- a special luncheon
- and so much more!

NEW this year girls' have FIVE workshop sessions!



Waukesha

Continuing Education & Professional Development

Girls' Schedule of Events

8:00-8:30 am Check-in at UWM at Waukesha
8:30-9:30am Welcome Presentation

During the welcome presentation, everyone will have the opportunity to hear from our keynote speaker, Andrea Bequest, a physician assistant working in internal medicine at the Medical College of Wisconsin and Froedtert Hospital. Learn how she took steps to becoming the practitioner she is today and what brought her to choose a career in the STEM fields.

Along with our keynote speaker, this year we are also welcoming the non-profit organization 'Grateful Girls' to our Conference who are eager to inspire, motivate and encourage girls of all ages.

9:35-10:25am Session I
10:30am-11:20am Session II
11:25am-12:00pm Lunch
12:05-12:55pm Session III
1:00-1:50pm Session IV
1:55-2:45pm Session V
2:50-3:00pm Wrap-up and pick-up

Parent Program

8:30-9:30am Welcome Presentation with girls
9:30-10:30 am DOJ Human Trafficking
10:40-11:20 am College Prep 101

Department of Justice, Human Trafficking: Parents are invited to join us for an information session presented by the Department of Justice on the human trafficking epidemic that is sweeping our country! This issue is closer to home than you might imagine. Learn how to prevent your child from becoming a victim and how to identify common warning signs.

College Prep 101: The parent program will also discuss higher education options, a suggested timeline for college preparations and what you can do to prep your student now and throughout their high school career.

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

Workshops

1. Stranger than Science Fiction

Every day we are discovering and learning more about objects in our universe that are stranger than science fiction. One such object is the black hole. You will learn how they are formed, how they can turn you into spaghetti, and even mess with space and time itself. We will be working with a model of space time and how it responds to a black hole. Finally, have you ever wondered where the atoms in your body came from and how old they are? Well, you are in for another shock from our universe!

2. A Look Inside the Bovine Hide

If you are interested in veterinary medicine, this workshop is for you! 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. Explore the development of calves with hands on reproductive tract examination then deliver your own calf by C-section. View jars containing interesting livestock parasites and anomalies.

3. Trauma Nurse 101

If you saw an injured person would you know how to help or what steps you could take to minimize a patient's injuries? Learn from nurses at Children's Hospital on what they would do in certain circumstances and how you can master these skills in the field! Topics that will be discussed are interventions, which can be done in the by someone not medically trained ex: C-spine, splints, tourniquets and epi-pen administration.

4. Fancy Feet: Shoe Design Engineering

Engineers design many products to make them better, even shoes. In Fancy Feet you will design a shoe that can support your weight and that you can walk in. It may be a sport shoe, a high heel shoe, platform shoe or a new type of shoe you invent. We'll step through the design process, make a prototype from simple materials, and we'll see if your shoe stands up to testing.

5. Water Wonderful World

Dive into the deep end and explore the world of marine mammals with Ocean Connections! This workshop will feature hands-on activities that delve into marine mammal adaptations, how we train and how we provide exceptional welfare to the seals and sea lions that call us home. Learn all about the animal field care from one of the Ocean Connections animal care team members!

6. Ground-Truthing 101

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 use ArcGIS software and aerial imagery to identify environmental features on the UWM at Waukesha. Then, we will head outside to determine if our mapped features match what's present using scientific observations. This workshop will be partially outdoors so please dress accordingly depending on the weather.

7. Projected Structure Challenge

How far do you think you can extend a golf ball 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 a golf ball from the wall!

8. What's Behind Those Criminal Minds?

Learn how criminal psychologists look for personality patterns and study somebody's personality profile for suspicious cues. Those clues can help benefit private investigators, criminal cases or even help people resolve personal issues. We will test your handwriting and speech patterns to match them with certain personality types. Come learn the superpowers of psychologists!

9. Environmental Engineering 101

Spend time exploring how engineers work together to reduce, reuse, recycle in order help sustain our environment. This hands-on experience will allow you the opportunity to think like an environmentalist and imagine, plan and create a potential solution to an environmental issue. Engineers are the problem solvers of the world, discover just how fun and inspiring that can be!

10. A Peek into Python Programming

Come challenge yourself to explore the incredible world of Python Coding! Python is a computer programming language used to make video games, web sites, desktop GUIs, software developments and much more! You will learn the foundations of making an interactive program right from the start. Discover just how fun it is to see your ingenuity on the computer screen!



Continuing Education & Professional Development