



Climb inside a crime scene...Study what makes an orange, orange...Grab a close-up view of your own DNA necklace! Check out GEMS (Girls, Engineering, Math and Science) 2009. This event will inspire girls in grades 6, 7 and 8 to explore careers in engineering, chemistry, physiology, geometry, health care, biology, technology and MORE, all while interacting with other girls who share similar interests and aspirations!

DATE, TIME AND LOCATION

GEMS will be held at UW-Fox Valley in Menasha on **Saturday, October 3, 2009**. Check-in begins at 8:45 a.m. in the Union at UW-Fox Valley. Our event kicks off with a keynote presentation by Dr. Ann Liebeskind, of Affinity Health System, who specializes in the care of patients with difficult cholesterol. This presentation will be followed by two interactive workshops, a special luncheon, an afternoon workshop and a closing presentation. The event ends at 2:45 p.m.

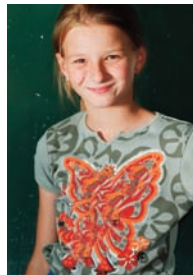
ENROLLMENT PROCEDURE AND TUITION

General Info

The GEMS registration is \$25 on or before September 25. After September 25, the registration fee is \$35. The fee must accompany your registration form. Payments can be made by check, MasterCard, Visa or cash. Make checks payable to UW-Fox Valley. Scholarships are available for girls demonstrating financial need. Please indicate on your registration form if you qualify for the free/reduced lunch program at your school and enclose a copy of the Parent Notification of Eligibility.

Easy Ways to Register

- Register online 24/7 by going to www.uwfox.uwc.edu/conted and clicking on GEMS 2009.
- Register by mail: Complete the Registration Forms, Hold Harmless and Photo Release Form and mail it to: UW-Fox Valley; Office of Continuing Education; 1478 Midway Road, Menasha, WI 54952.
- Register in person at the Office of Continuing Education at the UW-FV campus, Room 1714.
- Fax: Complete the registration form, Hold Harmless and photo release form and fax it with credit card information to (920)-832-2674.
- Register by phone using a Master Card or Visa. Just call (920)-832-2636.



**A Hold Harmless and Photo Release Form will be e-mailed to you and must be completed and submitted within one week of phone registration. Your child will not be officially enrolled in their classes until the Hold Harmless and Photo Release Forms are received in the Office of Continuing Education.*

Class Choices and Cancellation Policy

- Individuals should choose desired classes and session(s) for each program they register for. It is very important that we are provided with multiple choices.
- Course selections will be assigned on a "first come, first serve" basis.
- Confirmation letters will be sent approximately one week prior to the start of class. If classes are full, girls are placed in the next available class.
- We reserve the right to cancel classes due to low enrollments.

GOALS

- Increase awareness of careers in engineering, math, science and technology.
- Understand how to pursue a career in engineering, math, science and technology.
- Raise awareness of the benefits of a healthy lifestyle.
- Interact with female role models in engineering, math, science and technology.
- Develop confidence that engineering, math, science and technology careers are open to you.

Keynote Speaker

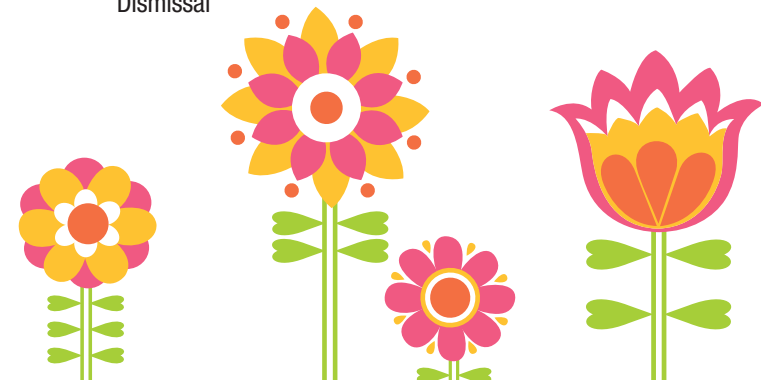


Ann Liebeskind, MD

Dr. Liebeskind is a clinical lipidologist specializing in the care of patients with difficult cholesterol or lipid management needs. She has a special interest in preventive cardiology. Dr. Liebeskind earned her medical degree from the University of Wisconsin Medical School and completed her residency at the University of Kentucky Hospital. She is board-certified in internal medicine and pediatrics, and is among the first Diplomates of the American Board of Clinical Lipidology. Dr. Liebeskind is happily married and "mom" to two adorable little boys. She is excited to be a part of GEMS 2009, share her story and meet our fantastic group of girls.

Agenda

8:45 – 9 a.m.	Registration and Check-in
9 – 9:30 a.m.	Keynote Presentation
9:30 – 9:40 a.m.	Organize for Session 1
9:40 – 10:40 a.m.	Session #1
10:40 – 10:55 a.m.	Snack Break and Organize for Session 2
10:55 – 11:55 a.m.	Session #2
12 – 1 p.m.	Lunch
1 – 1:10 p.m.	Organize for Session 3
1:10 – 2:10 p.m.	Session #3
2:10 – 2:30 p.m.	Closing, Door Prizes and Evaluation
2:45 p.m.	Dismissal



Sessions for Girls

Eat Your Colors - All About Phytonutrients

Instructor: Lori Deering, Registered Dietitian, Affinity Health System

Orange you curious what makes an orange, orange? Have you ever peeled a pomegranate or a purple potato? Stir up some fun while sampling a rainbow of colorful and exotic fruits and vegetables. Discover the science linking colors in fruits and vegetables to nutrition and health. Try some tasty technicolor treats!

Genes in a Bottle

Instructor: Dr. Kimberly Dirlam-Schatz, Associate Professor of Chemistry, UW-Fox Valley

We all know everyone's DNA is different. But do you know how to take DNA from your body and turn it into something that is hard and structured? Capture your genetic essence in a bottle! Extract genomic deoxyribonucleic acid (DNA) from your cheek cells and watch it precipitate from solution as floating white strands. Your DNA will be collected and transferred into your personal DNA necklace.

It's not your Mother's Paper Anymore!

Instructors: Barb Sauer, Director of Education/ Visitor Services and Kathy Klemen, Educator, Paper Discovery Center

Paper-- boring? It's not! Learn the ins and outs of papermaking and why the Fox Cities is known as The Paper Valley. Do you understand the science behind the magic when water and newspaper are recycled to create a new piece of paper? Discover the science of papermaking. Customize your own piece of paper. Experiment with paper coating and test paper for various characteristics. You will never look at paper in the same way.

Back to the Future...Women in Technology

Instructor: Carrie Paine, Maplewood Middle School Computer Technology, Menasha School District

Who were some of the first women that made a significant impact on technology? What were their lives like? Take a virtual trip to the past and into the future. Meet the women who made technology possible. Discover how math and science played an integral part in the lives of these leading women.

Indirectly Accurate

Instructor: Michelle Vosters, Maplewood School Mathematics Teacher and Gifted/Talented Coordinator, Menasha School District

How tall is the Barlow Planetarium? How high is my kite flying? Experience math like you've never experienced it before. Explore measurement using a variety of unique tools and techniques.

Go Green...Living a Sustainable Lifestyle

Instructor: Catherine Neiswender, Community Development Educator, UWEX Winnebago County

Water your drinking? How do you measure your footprint? What does digging for coal have to do with being green?" Living a sustainable lifestyle is more than a fad. Learn cool ways to live a greener life.

Navigating the Wild Blue Yonder

Instructor: Kate Bernard, Flight Instructor, CAVU Aviation

How do pilots navigate the sky? Learn how to plan a trip in a small airplane using the same information and tools pilots use. You will work with maps, weather forecasts and performance data for a real airplane. Find out what it takes to become a pilot and plan trips round the state or across the country.

Oh No...I'm Getting Old!!!

Instructor: Kristin Luggner, Advanced Geriatric Nurse Practitioner, Affinity Medical Group

What's it like to grow old? The year is 2075; you are in your seventies. How's your hearing? What about your sight? Are you forgetting things? Using simulators, you will experience some of the challenges of growing old such as arthritis and hearing challenges. Discuss normal and abnormal aging changes including memory loss. By the end of the session, you will look at getting older in a completely different perspective.



It's Alive!!!

Instructor: Melissa Koehler, DO Gynecology, Obstetrics & Gynecology, Affinity Medical Group

Explore fetal development and learn how something the size of a pinhole grows into a developed baby. Study 3D pictures from ultrasounds and see what happens when things do not go as expected. Discover why we consider a baby a parasite, as it obtains nutrients for the mother! You will explore how a mother's body supports a new internal life – from changes in the heart and lungs to how the body prepares for childbirth!

Forensic Science

Instructor: Kacey Des Jarlais, Scientist, Georgia Pacific

Who did it? How did it happen? Climb inside the science of a crime scene and analyze how it occurred. The crime lab will focus on artificial blood and DNA testing, urinalysis, fiber and hair analysis and mystery substance identification. By the end of the session you will know several tricks of the trade. Today's high profile crimes (and TV shows) will become much more exciting!

Digital Storytelling

Instructor: Evelyn Li, Instructional Technologist, UW-Fox Valley

What do you get when you combine a specific topic, a point of view, a variety of technology and loads of creativity? Unlimited potential, that's what. Using computer-based tools including video and digital camera, sound recording and audio/video editing software you will construct and deploy your own unique digital story. Begin by storyboarding your ideas. Gather and analyze the information and organize your resources. Finally edit your movie by synchronizing the images/videos with narrations and music background. The result is a story that is original, innovative, and a whole lot of fun!



It's Our Own Creation

Instructor: Dr. Ayanna Bernard, Research Scientist, Georgia Pacific

What's about three inches long, cylindrical in shape, colorful and glossy and essential to a girl's back pack? Check it out—it's lip gloss. Design your own and in the process, find out about the roles scientists and engineers play in making the things we love to use.

Red Eyes or White Eyes: It's All in the Genes

Instructor: Dr. Teresa Weglarz, Lecturer, UW-Fox Valley

Can you roll your tongue? Do you have attached or detached earlobes? Is your index finger longer or shorter than your ring finger? Which thumb do you overlap when you fold your hands? Are these traits inherited or not? Discover how your DNA helps to predict your traits. We'll study fruit flies to understand the marvels of DNA.

The Ultimate Sustainable Design

Instructors: Catherine Cruickshank, Designer, Kristi Lynch, Architect, Wendy Danielson, Project Manager, Hoffman, LLC

If you are intrigued with buildings, computer programming, sustainable design and teamwork, then The Ultimate Sustainable Design is right up your alley. Be on a design team with the task of designing the ultimate 21st century classroom. Start with programming a sustainable design, cost estimating and bidding, and successfully managing the construction process.

Tinker Toys with No Boys!

Instructors: Michelle Wollner, Senior Project Engineer, Amanda Farr, Mechanical Engineer, Kohler Company

Do you think Tinker Toys are just for toddlers? Think again. Tinker Toys are the basis of team-oriented competition that will give you insight into the exciting world of engineering! As a team of engineers, you will compete to build an exact replica of a Tinker Toy car (with a few twists!). Each team represents a company that is competing for the business of a highly sought-after customer. Your success depends on the time it takes to perform the project and the number of defects in the finished product. The winning team in each session receives prize.

(Continued on next page)

Sessions for Girls (Continued)

Health Heart, Healthy Life

Instructor: Dr. Teresa Gonya, Associate Professor, UW-Fox Valley

You have more than 8,000 kilometers of blood vessels in your body and the heart pushes blood through each and every centimeter. Heart health is the most important part of living a long, healthy life. You will look at the heart to learn how it works as a pump.

Using tools to listen to the heart learn what happens to your heart when you exercise, and why exercise is so important. Discover how to make exercise fun and part of your daily routine. Wear comfortable clothes and get ready to pump it up!

Skin as a Body Canvas

Instructor: Dr. Teresa Gonya, Associate Professor, UW-Fox Valley

Skin is the only body organ that we dress and decorate. We paint, tan, pierce, change and expect it to cover us. We will look at skin structure and learn what happens when the sun makes us tan and gives us summer freckles. We will also look at skin as it grows with us, and learn how to keep your skin healthy for as long as you live.

Sunken Treasures

Instructors: Jennifer Bloemer, Chief Engineer, Emily Wiegmann, Design Engineer, Stephanie Schiegg, Design Engineer, Pierce Manufacturing

“All Hands on Deck!” Come board the ship and join the crew as you compete in the exciting world of engineering! As a team of pirate engineers, you will learn the basics of buoyancy and compete by building the pirate ship that will carry the most stolen treasure. Watch out or your treasure may be lost at sea forever! Remember, there’s no “hornswagging” in this competition. “Arrrr!”

How Sweet it is...Or is it?

Instructor: Sandy White, Plant Physiologist, Chemist and Owner of Botanical Indulgence

What scents make you relax? Aromatherapy is the use of fragrances and herbal substances to affect or alter a person's mood or behavior. Billions of dollars are spent on air fresheners, scented candles and essential oils in America each year. Discover how to create various natural products and why aromatherapy works.

Taking the Toll on Health

Instructor: Patricia Haas, Corporate Chef

Do you know what you should eat, but don't like the taste? You shouldn't have to choose. Using the standard Toll House cookie, you'll evaluate products with alternative forms of sweeteners, fats, flours and other ingredients. Do they taste different? Is the texture of the product different? Is the substitution worth the health benefit? You'll decide what modifications make sense in a healthy diet and which ones aren't worth the sacrifice. Learn how you can have your cake and eat it too!

Magic Message

Instructor: Jody Hoppe, Software Engineer, Plexus

You'll amaze your friends by making messages that magically appear. Doesn't that sound impossible? Not when electronic circuit and components are doing the work. You'll build your own electronics kit and create electronic messages while learning about engineering, electronic circuits, components and soldering skills.

Parent Sessions

It's Never Too Early to Start Thinking About College!

Presenter: Mary Ann Bazile, MS Interim Assistant Director of Student Services, UW-Fox Valley

When should you and your daughter start planning for college? Second semester, senior year is not the best answer. To help your daughter prepare for success in college, you need to start now, while she's in middle school. Being prepared means thinking about how to pick the appropriate high school classes, how to explore college options, how to pay for college and more. The time to start thinking about the future is now!

Cyberspace...Its Power and Pitfalls

Presenter: Amy Cook, Liaison Officer, Maplewood Middle School

It's likely your daughter spends more time on the Internet than she does talking with all her family members combined, but do you know what your daughter is doing online and who she is communicating with? Get to know the power and pitfalls of Facebook, YouTube, MySpace, Twitter and other sites she may visit. Learn what questions to ask to protect her while still respecting her privacy.

Interacting with Your Daughter... Making it a Joy

Presenter: Mary Mattson, MSW, CAPSW, Clinical Social Worker University Counseling Center UW-Oshkosh

As girls enter adulthood they deal with hormonal and brain changes, social pressures, and issues related to self image. So, with all that going on, what is your role? It means being empathetic when the tears fall, being tough when necessary and knowing when to give her breathing space. During this session, we'll discuss ways to effectively communicate and help your daughter deal with the growing pains of adolescence. Join us and learn how to enjoy your daughter's experiences and growth.

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