



## GEMS Conference Fast Facts

For girls in 6th-8th grade

Saturday, March 17, 2012

8:00 am– 1:00 pm

McPike Complex,  
Lewis & Clark  
Community College,  
Godfrey, Illinois

Registration: \$15  
Includes snack &  
conference t-shirt  
Fee waivers available

Parents Welcome—  
We have educational  
sessions for you,  
too!

For more info & to  
register:

[www.gemsconference.com](http://www.gemsconference.com)

## Math, Science, & Technology are COOL! Jump into your future with GEMS!

We all need to work together to give our 6th, 7th, & 8th grade girls a bright future—why not encourage them to explore careers in math & science?

The GEMS Conference brings 6th-8th grade girls, parents, teachers, community leaders, and professional women together in an effort to increase young women's knowledge and awareness of math, science, and technology careers in a fun, hands-on setting.

### GIRLS WHO PARTICIPATE IN THE GEMS CONFERENCE WILL EXPERIENCE:

#### *Welcome to the Real World*

An award-winning session giving girls a chance to experience real life situations & decision making

&

#### *Hands-On Workshops for Girls*

Presented by professional women in our community, these workshops give girls exposure to science, math, and technology-based careers ranging from dentistry to robots (see back side of flier)

### WORKSHOPS FOR PARENTS/GUARDIANS/TEACHERS

Special workshops for parents, guardians, & educators who work with girls. 5 CPDUs available; information available at the GEMS website.

Sponsored by:

American Association of University Women-Illinois, Inc. Piasa Council  
Alpha Kappa Alpha Sorority, Inc.

**FOR MORE INFORMATION & TO  
REGISTER:  
[www.gemsconference.com](http://www.gemsconference.com)**

## GEMS Conference, March 17, 2012

For current workshop list & to register: [www.gemsconference.com](http://www.gemsconference.com)

*All workshops are limited to 15 students & are filled on a first-come, first-served basis!*

**Pharmacists Do More Than You Think!** Dr. Lakesha Butler, Clinical Assistant Professor in the Department of Pharmacy Practice, SIUE. Did you know that there are more than 30 different career paths a pharmacist can choose? Come for a hands-on sample of some of the health matters we regularly help with. You can see what it's like to be a pharmacist that works one-on-one with her patients.

**Nursing: Simulate to Stimulate.** Dawna Egelhoff & Robin Halemeyer, Lewis and Clark School of Nursing. Use your math skills to calculate and deliver medications to a mock patient room and assess patient for vital signs, heart and lung sounds under the direction of two Lewis and Clark College Nursing faculty.

**DNA In You and On You! The Science and Craft of Genetics.** Cindy Encarnacion, Ph. D., St. Louis Science Center. Learn about DNA and genetics. How does the DNA in your body make you unique? Make personalized genetic jewelry to take home!

**Macroinvertebrate Mania!** Erin Hilligoss-Volkman, U.S. Army Corps of Engineers. Have you ever heard of a macroinvertebrate? Spend some time exploring a pond looking for the fascinating critters that live there! We'll bring the waders – prepare to get wet!

**Title: It's a Gas!** Pam Keck, Chemist, Monsanto. See nitrogen turn from liquid into a gas. Taste ice cream made before your eyes with this very cold stuff. Watch carbon dioxide convert from a solid to a gas. Prepare invisibility cards to make Harry Potter smile.

**People, Planet and Pocketbooks!** Marcia Lochman, Lewis and Clark College Director of Sustainability. What does it really mean to "go green?" Learn why the green movement is so critical to us all by understanding the principles of sustainability and how it changes the way think, live, work and play.

**Increasing Endangered Species Habitat within the Mississippi River Floodplain.** Kate Manar, Army Corps of Engineers. The US Army Corps of Engineers has many projects to increase habitat for endangered species within the Mississippi River floodplain. Hands-on activities will describe successes at the Migratory Bird Sanctuary.

**Dirt Shirts.** Deb McNabney, Retired Science Teacher. You too can create a unique product. Tie dye a shirt the natural way using clay native to Illinois and South Carolina.

**Obstacles of Fun!!** Linda Ott, OTCL, Lewis and Clark College. Discover the world of occupational therapy (OT)! Explore various adaptive and sensory approaches to overcome limitations following a serious illness or injury and operate a wheelchair.

**Tech Diva.** Theresa O'Connor, Instructional Technologist, Alton Middle School. 3-D objects such as people, animals, and vehicles populate a virtual world and students create a program to animate the objects. Compose animated stories in a virtual world.

**Who Dun It?** Donna R. Rees, Illinois State Police. Meet an Illinois Forensic DNA Analyst. You will solve a crime and make a copy of your own fingerprints to take home.

**Open Wide & Bite!** Michelle Singley, Lewis and Clark College Hygiene Program. Learn about the anatomy of the mouth, the function of the teeth and other oral structures using tooth and mouth models, and interactive quizzes and games.

**Robots and You.** Emily Stanley, Girl Scouts of Southern Illinois, Robots are all around us – some you may interact with everyday. Come try your hand at design and programming a robot using Lego Mindstorms NXT kits and a PC.

**Architecture: Is it in the PLAN for your future?** Amy Tongay, Trivers Associates. Do you love to envision creative ideas and then using your problem solving and communication skills to bring the idea to reality? Animate plans using 3D software.

**What's That Smell?** Andrea Tyler, Civil Engineer, Ameren Illinois. Explore the path natural gas takes from underground formation all the way to your house! We will also use gas tools to investigate real gas leaks both indoors and outdoors. To conclude, we'll put on our safety glasses & watch a house fill with natural gas & explode!