



Urbana School District STEM Enrichment Camp 2013

Find our program description online at www.usd116.org

A Science, Technology, Engineering and Mathematics experience for students entering
1st – 8th grades

Dear Parents and Family Members,

Urbana's second annual STEM Camp is designed to promote discovery through learning experiences in science, math, technology, and engineering.

Students are invited to choose among a variety of inspiring and fun STEM classes. This is a full day camp and lunch is provided. Please look through this brochure with your child and then complete the registration right away. Don't wait because classes fill quickly. At the end of STEM Camp, families and community members will be invited to a showcase of the students' activities. We hope you can attend! The teachers and I are looking forward to wonderful STEM Camp 2013!

Warmly,

*Barbara Sartain, STEM Camp Principal, and the
STEM Enrichment Camp Staff*

Dates: June 3 – June 13
Monday-Thursday

Time: 8:30 – 4:00

Location: Urbana Middle School
1201 S. Vine Street



Welcome!

Please note some important details below:

Registration

Registration for students entering grades 1 through 8 will be accepted beginning April 5. You may register by mail or online. No phone or fax registrations will be accepted. Registrations are processed on a first-come, first-served basis, so please register early to get your first choice of classes! It is also important to list alternate choices for classes selected. Letters of confirmation will be sent in early May.

Cancellation of classes

STEM Enrichment Camp Staff reserve the right to cancel any class that does not have a minimum enrollment.

Refunds

Requests for refunds will be granted only until May 31, 2013.

Drop off/Pick up

A parent or family member must walk students to and from the sign in area at the Vine Street entrance near the flagpole to the North of Urbana Middle School. Classes begin at 8:30am and end at 4:00pm.

Drop off will be from 8:15 to 8:30

Pick up will from 4:00 to 4:15

Please Note: STEM Enrichment Camp is a full day camp and lunch will be provided. Students are expected to register for two camp sessions (one am and one pm) and will eat lunch in the UMS cafeteria with their friends and teachers.



Mission Statement

The mission of Urbana School District 116, a multi-cultural community committed to educational excellence, is to ensure that all learners acquire knowledge, develop skills, and build character to achieve personal greatness and help create a better global society, by providing innovative, comprehensive programs, respecting individual learning styles and cultural differences, and fostering caring and nurturing relationships, while engaging each student, every family and the entire community.



Program Goals

The STEM Summer Enrichment Camp is designed to:

- Provide hands-on exploration in science, math, engineering, and technology
- Provide engaging and enriching experiences for students
- Promote activities that will help students develop critical thinking skills.

STEM camp classes for students entering 1st and 2nd grades

Mythbusters: Fairy Tale Science

Offered am only!

Grades 1-2 Taught by Sandra Osorio

Do you ever wonder about the events in fairy tales? Was there once a real story that evolved into a fairy tale or are they simply myths? In Fairy Tale Science, students will be introduced to The Engineering Design Process and The Scientific Method to investigate and myth-bust fairy tales. Through the steps of identifying a problem, observation, hypothesis, experimenting, collecting and analyzing data, and drawing conclusions, students will investigate scientific questions raised by various fairy tales.



Solar Energizers

Offered am & pm

Grades 1 - 2 Taught by Chasity Beckless

Students will participate in a variety of hands-on investigations and explorations that will introduce primary students to solar energy. Students will spend some time outdoors to conduct solar related experiments, including designing and testing a solar cooker!

Music Counts

Offered am & pm

Grades 1 - 2

Taught by Meagan Tipton

In this class we will use math to teach us basic keyboard, music theory, and composition skills. Students will learn how math is everywhere in music. We will also do science experiments to find out about sound waves and why notes sound different from each other. Students will also use math to compose their own keyboard melody.



Young Engineers

Offered am & pm

Grades 1-2

Taught by Darcy Silver

Children are fascinated with building things and taking them apart to find out how they work. They are born engineers! In this session, students will begin with looking at inventions to increase their understanding of the design process. Students will also participate in two units from Engineering is Elementary called, "To Get To The Other Side: Designing Bridges" and "Catching the Wind: Designing Windmills." Opportunities for hands-on science activities, math challenges, and exploring technology will supplement the overall units.

Register online at: <http://www.usd116.org>
or

Fill out the last two pages of this booklet and
mail it with your check to:

*Tina Lehr, Urbana School District
205 N. Race Street, Urbana IL 61801*

STEM camp classes for students entering 3rd – 5th grades



Ancient Egypt: Math, Science and Technology

Offered am & pm

Grades 3 – 5 Taught by Melissa Reder

Have you ever wondered how or why the pyramids were built? Are you curious about different ways to complete math problems? Spend the weeks writing in hieroglyphics and using an Ancient Egyptian numerical system, including making and writing on papyrus!



Designing Your Own Website

Offered am & pm

Grades 3 – 5 Taught by Amanda Klousnitzer

Do you ever wonder how people design websites that we use everyday? In this class we will use a variety of technology to create our own wikispace on a topic that you have chosen. We will learn how to use Internet search engines to find research on our chosen topics, we will learn how to use digital cameras and photo editing software. We will also learn how to make a short iMovie on our topic and use other forms of technology to create our own website.

Modeling Math

Offered am & pm

Grades 3 – 5

Taught by Mark Harrison

This course will allow students to explore math in the real world. Students will conduct activities and use tables, charts and graphs to analyze the findings. Many projects will incorporate science activities and require students to use a variety of problem solving techniques, make predictions and organize data.

Building Bridges

Offered am & pm

Grades 3 – 5

Taught by Alex Valencic

Some of the earliest feats of engineering were the construction of bridges to transport people and supplies, cross chasms, and connect communities. Through literature, exploration, experimentation, and observation, students will use critical thinking and scientific understanding to design and construct bridges using a variety of styles and materials. At the end of camp, students will bring home a bridge of their own design and construction!



STEM camp classes for students entering 3rd – 5th grades

GPS Explorers

Offered am & pm

Grades 3 -5

Taught by Katie Hutchison

In this class students will gain hands-on experience with GPS technology. Students will learn how GPS units work and ways they can use GPS units to study and explore the environment. Classroom activities include an introduction to navigating with GPS units, geocaching (a high-tech treasure hunt), and creating ecotours based on visits to local nature preserves. In addition to using GPS units, students will also gain experience using flip video cameras, Google Earth, and webpage design programs.



Eyes In The Skies

Offered pm only!

Grades 3 – 5 Taught by Don Barbour

Join us as we build devices with enough lift to carry a small camera into the air. As we design and construct hot air balloons, kites, propeller planes, and rockets, we will examine aerial surveillance in terms of aeronautics, rocketry, thermal dynamics, photography, and other areas of science and technology that deal with the historic race to find out what your adversaries are up to.



The Lens of History

Offered pm only!

Grades 3 – 5

Taught by Rusty Clevenger

Today cameras surround people in almost every aspect of life. Cameras are all types of sizes and shapes. Cameras can be found in many different places, like your Nintendo DS, iPod, Cell Phone, and Computer. What was the world like with out cameras? Where did cameras come from? The Lens of History is a course designed to teach students about the history and science of photography. Students explore how to create processes, and capture their own images. Students will learn how to create their own portable camera out of trash and how to capture and edit their own photographs using digital cameras computer software. While students explore the many tricks and quirks of photography, they will also learn interesting facts about the artistic and scientific history of photography. Students will create their own cumulating digital portfolio that will be displayed at a final exhibition.

STEM camp classes for students entering 3rd – 5th



Exploring Digital Story Telling

Offered am only!

Grades 3 – 5

Taught by Rusty Clevenger

Have you ever wondered how movies and cartoons are created? Who comes up with the stories? Exploring Digital Storytelling is a course designed to let students explore the vast resources of digital media and develop a portfolio that captures their own identity through digital storytelling. Students will learn how to represent themselves in today's ever evolving society of video, animation and photography by learning about creative, current and captivating methods of producing personal narrations. While students explore the many tricks and quirks of photography and video, they will also learn interesting facts about visual and commercial artists that use photography and video. Students will create their own cumulating digital portfolio that will be displayed at a final exhibition.

Let's Go Green And Make A Difference

Offered am & pm

Grades 3 – 5

Taught by Betsy McSherry

This class will teach students how to "Go Green" and how the different types of green/alternative energy are better than using fossil fuels. In this class, students will explore the 3R's (Reduce, Reuse and Recycle) and what they can do at home to help lower their carbon footprint. We will also focus on alternative energy such as, wind, solar, and electric energy. We will do different activities such as make our own paper, build a windmill, and create an electric car. We will have field trips to discover our impact on the environment and we will also have guest speakers to discuss green energy! Come join us to have fun and learn how to change the environment for the better.

Crime Scene Investigation

Offered am & pm

Grades 3 – 5

Taught by Timarie Ryan



The Urbana Tiger has been stolen!! We need junior detectives to help us solve this horrible crime. We will need to conduct interviews, match fingerprints, take hair samples, and more. If you think you have what it takes to solve a mystery come and join this adventure!



STEM camp classes for students entering 6th – 8th grades

More Than One Way To Write

Offered am & pm

Grades 6 – 8

Taught by Kris Ackerman

It's time to think outside of the box. In this class you will learn how to write without using a single word (unless you REALLY want to)! If you think this is impossible, think again. We will be creating digital essays using iMovie and Garage Band. In this class a picture really is worth a thousand words.

Engineering Looks Good

Offered am & pm

Grades 6 – 8

Taught by Karie Tess

Look smart! We will work with plastics, soft circuits, and constructing traditional clothing and accessories out on non-traditional materials. You can play with materials, try out ideas and problem solve in the context of a collaborative, project-based class. Make something!

Science Of Sports

Offered am & pm

Grades 6 – 8

How are all of the different sports materials made? How are they alike? Different? We will look at the composition and use the computers to analyze the rebound ability of different sports materials. You will also create your own materials that have the most and least bounce ability. For a final project create your own obstacle course for competition.

Eyes In The Skies

Offered am only!

Grades 6 – 8 *Taught by Don Barbour*

Join us as we build devices with enough lift to carry a small camera into the air. As we design and construct hot air balloons, kites, propeller planes, and rockets, we will examine aerial surveillance in terms of aeronautics, rocketry, thermal dynamics, photography, and other areas of science and technology that deal with the historic race to find out what your adversaries are up to.



Taught by Laura Hlinka



STEM camp classes for students entering 6th – 8th grades

Math And The World Around You

Offered am & pm

Grades 6 – 8

Taught by Jessica Schad

Mathematics is all around us and is used everyday! If you want to get a leg-up in your math studies and learn new ways to make math fun and engaging, then this is the class for you! Students who are looking for additional math challenges will enjoy our variety of hands-on math activities. Prove why the Pythagorean theorem is essential to professions, experience how video game programmers use mathematic formulas and transformations to make their magic, and use our world's coordinate system to participate in treasure hunts. Come learn how math is applied in our world everyday!



Computer Animation

Offered am only!

Grades 6 – 8 Taught by Erin Lodes

Come learn how to use a program called Scratch to design and create your own computer games or animations! Scratch is a program built just for students, which uses a graphic computer language (based on the C+ language) to get students thinking like programmers. Students will work daily on laptops to learn the Scratch programming language. They will build several simple games as a class, and then will plan and design their own unique game or animation. This class is appropriate for students with any level of computer experience.

Digital Rock Band

Offered pm only!

Grades 6 – 8 Taught by Erin Lodes

You can use iPads and computers to be your own rock star, even if you don't know how to play an instrument! Students will learn to play iPad instruments, and to use MIDI controllers with GarageBand on computers. We'll play guitar, bass and drums on the iPads, use the iPads to auto-tune our voices, use piano keyboards with computers to play any instrument we want, and rig up Rock Band drum sets to add authentic drum beats. Finally, we'll run all of our instruments through a soundboard to as we combine our skills to practice and perform a song as an entire class. This class is appropriate for students with any level music or computer background.

Registration Information

1. Please indicate your class selections on the following page. Make sure to select a first and second choice for each morning and afternoon session.
2. Students who are not currently enrolled in Urbana School District are considered to be out-of-district students and are required to pay the out-of-district fee.
3. Students enrolled in this camp are subject to the same code of conduct as they are during the regular school year.

PARENT'S AUTHORIZATION:

I understand that there may be certain risks of physical injury, damage or loss as a result of participating in camp classes. In acceptance of my child's registration, I relinquish all claims I may have against the Urbana School District, the staff, organizers, or teachers as a result of participation in this program.

Furthermore, I hereby grant the Urbana School District and the STEM Enrichment Program permission to videotape or photograph my child for future STEM Enrichment Program educational and promotional purposes.

Parent's Signature (required): _____

Payment Information

Please make all checks out to "Urbana School District #116."

Tuition fees are as follows:

- Students enrolled in Urbana School District:
→\$350
- Students enrolled in Urbana School District who qualify for reduced lunch status:
→\$150
- Students enrolled in Urbana School District who qualify for free lunch status:
→\$0
- Out-of-district students (who are not enrolled in Urbana School District):
→\$450

Please mail this form to:

Tina Lehr, Urbana School District, 205 N. Race Street, Urbana IL 61801

Summer 2013 Mail-In Registration

Please Print

Student's First Name:	Student's Last Name:
Student's Street Address (including city & zip code):	
Current School:	Grade in 2013-14:
Special Needs or Allergies:	Student's Ethnicity/Race (optional): <ul style="list-style-type: none"><input type="radio"/> Asian or Pacific Islander<input type="radio"/> American Indian or Alaskan Native<input type="radio"/> Black, non-Hispanic<input type="radio"/> Hispanic<input type="radio"/> White, non-Hispanic<input type="radio"/> Nonresident Alien<input type="radio"/> Other/Unknown
Parent/Guardian Name:	
For your child's safety, please indicate how he/she will be getting home after camp each day: <input type="checkbox"/> My child will be taking the MTD bus <input type="checkbox"/> My child will walk home <input type="checkbox"/> My child will be picked up by a parent <input type="checkbox"/> My child will be picked up by a designee Name and phone number of designee:	
When you child is at camp, what is the best way to reach you?	
If your child becomes ill and you cannot be reached, please provide the name and phone number of someone you authorize to pick up your child:	
Urbana School District Students Only: Does your child qualify for: Free Lunch _____ Reduced Lunch _____	
STEM Enrichment Camp is a full day camp and you must select a morning and afternoon class. Please list your first and second choices. Although we will do our best to meet your requests, we cannot guarantee placement in your first choice of camp classes.	
Morning Session: <i>1st Choice Class</i> _____ <i>2nd Choice Class</i> _____	
Afternoon Session: <i>1st Choice Class</i> _____ <i>2nd Choice Class</i> _____	
<i>Please mail this form to: Tina Lehr, Urbana School District, 205 N. Race Street, Urbana IL 61801</i>	