

AUBURN UNIVERSITY  
COLLEGE OF SCIENCES  
AND MATHEMATICS

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Engaging More  
Community Connections



Volume 6: Issue 1

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## Upcoming Events & Programs: Science Matters Registration

Registration Opens: Monday, February 3<sup>rd</sup>

Science Matters is a summer enrichment program for elementary students in rising grades 1-6 offering youngsters a supercharged science experience. The program allows participants to explore the world of science through real experiments, technology and art projects, and hands-on, make-n'-take activities. During this action-packed program, kids can design and build, dabble in the art of chemistry, "become a flight specialist", see amazing critters, and more! Science Matters offers six different science-themed weeks for rising 1st-4th graders to choose from and four weeks for rising 5th-6th graders to enjoy. Parents may choose between the Regular Day option from 8am-3:30pm or the Extended Day option from 8am-5pm. Prices range from \$170 - \$240 per week/child. Multiple week discounts are available. Courses fill on a first-come-first-serve basis, so be sure to register today!

### Program Fees Include:

- All materials
- Experienced science instructors
- Science Matters tote bag
- Morning and afternoon snacks
- Special Science Matters T-shirt
- Exploratory Activities (exclusive on-campus science tours, local trips, and/or great demo. shows)

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## Upcoming Events and Programs (cont'd.)

### Science Matters – Summer Dates/Courses

#### Week 1 – May 27 – 30, 2014\*

- 1<sup>st</sup> – 2<sup>nd</sup> Grade: My Sensational Senses – Aleesa Zutter (Yarbrough Elementary School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: Branching Out – Dr. Bruce Zutter (Ogletree Elementary School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: Farm to Food – Rebecca Balkcom (Auburn Junior High School)

#### Week 2 – June 2 – 6, 2014

- 1<sup>st</sup> – 2<sup>nd</sup> Grade: “Bugging” Out – Cathryn Albright (Dean Road Elementary School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: Slimy Science: The Encore – Gina Watkiss (The Heritage School)
- 5<sup>th</sup> – 6<sup>th</sup> Grade: Amusement Park Adventure – Andrew Click (Sanford Middle School)

#### Week 3 – June 16 - 20, 2014

- 1<sup>st</sup> – 2<sup>nd</sup> Grade: Ticket to Travel – Amanda Morley (Yarbrough Elementary School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: Culinary Chemistry – Rachel Newman (Yarbrough Elementary School)
- 5<sup>th</sup> – 6<sup>th</sup> Grade: Hot Wired – Frank Ware (Sanford Middle School-Retired)

#### Week 4 – June 23 – 27, 2014

- 1<sup>st</sup> – 2<sup>nd</sup> Grade: The Body Shop – Amanda Morley (Yarbrough Elementary School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: The Hunger Games – Hilary Boyd (Auburn Junior High School)
- 5<sup>th</sup> – 6<sup>th</sup> Grade: Toying with Physics – Dr. Bruce Zutter (Ogletree Elementary School)

#### Week 5 – July 14 – 18, 2014

- 1<sup>st</sup> – 2<sup>nd</sup> Grade: Jurassic Park – Aleesa Zutter (Yarbrough Elementary School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: LEGO Mania: Part Deux – Frank Ware (Sanford Middle School-Retired)
- 5<sup>th</sup> – 6<sup>th</sup> Grade: Healthy as a Horse – Casey Johnson (Loachapoka High School)

#### Week 6 – July 28 – August 1, 2014

- 1<sup>st</sup> – 2<sup>nd</sup> Grade: Rock Your World – Cathryn Albright (Dean Road Elementary School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: Do you See What I See? – Hilary Boyd (Auburn Junior High School)
- 3<sup>rd</sup> – 4<sup>th</sup> Grade: The Underground Uncovered – Andrew Click (Sanford Middle School)

\*This four-day camp is offered at a reduced rate.

#### Registration Information:

Full course descriptions, registration forms, and parent information will be available beginning on **Monday, February 3<sup>rd</sup> at**

[www.auburn.edu/cosam/sciencematters](http://www.auburn.edu/cosam/sciencematters)

#### For additional information contact:

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## Summer Science Institute

Summer Academy for High School Students

Application Deadline Extended Due to Inclement Weather

**Extended Deadline: February 7, 2014**

This summer science program is for outstanding students who are currently in the 10<sup>th</sup> or 11<sup>th</sup> grades and are interested in science and mathematics. Students engage in real-world applications of science, perform experiments using cutting edge research equipment, and partner with COSAM researchers to gain lab skills not taught in high school.

The program is offered at no cost to accepted students. Interested students will need to download the full application and recommendation forms from [www.auburn.edu/cosam/ssi](http://www.auburn.edu/cosam/ssi).

Required documents include the following:

- Completed & signed Application Cover Page
- A 1-2 page essay
- A résumé detailing qualifications and extracurricular activities
- High School Math and Science Course Plan
- Standardized assessment scores (ACT, SAT, PLAN, PSAT)
- 2 completed recommendation forms
  - 1 form to be completed by a teacher (non-relative)
  - 1 form to be completed by an adult other than a teacher (non-relative)
- A headshot photograph



## Outreach Calendar

### February

- 1 TASSAL
- 3 Science Matters Opens!
- 4 GUTS Opens!
- 15 Elem. Science Olympiad
- 18 GUTS

### March

- 1 M.S. Science Olympiad
- 20 GEARSEF

## GUTS

### Getting Under the Surface

Registration Opens: February 4, 2014

GUTS is an evening program for 1<sup>st</sup> – 6<sup>th</sup> grade students and their parents or grandparents. Each evening session includes dessert followed by a 90-minute science activity featuring a “Getting Under the Surface” theme designed to demystify the science of topics ranging from DNA to creatures in the deep sea to how batteries work. The mission of GUTS is to enhance science literacy and engagement within our community by providing relevant science activities to students and their parents.

#### Spring GUTS Offerings:

##### Tuesday, February 18

1<sup>st</sup> – 3<sup>rd</sup> Grade: Rollercoaster Rally

4<sup>th</sup> – 6<sup>th</sup> Grade: That’s the way the ball...

##### Thursday, April 10

1<sup>st</sup> – 3<sup>rd</sup> Grade: Anatomy in Action

4<sup>th</sup> – 6<sup>th</sup> Grade: Boy, Oh Boy, Oh Buoyancy

Registration forms and full course descriptions will be available on Tuesday, February 4<sup>th</sup> at

[www.auburn.edu/cosam/guts](http://www.auburn.edu/cosam/guts)

#### For more information contact:

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## Robotics Academy

Registration Opens: March 3, 2014

June 24 – 27, 2014

The 4-day Robotics Academy (9am-4pm, daily) at Auburn University is aimed at rising 7<sup>th</sup> – 9<sup>th</sup> grade students interested in robotics. Working in teams, students will engage in real-world engineering scenarios that will culminate in a friendly competition on the last day of the academy. Students will be introduced to the engineering design process, the importance of engineering notebooks and technical writing, as well as gain hands-on experience programming and building



robots using VEX robotics kits. All aspects of the camp are applicable outside of the Robot Academy:

the engineering design process and engineering notebooks are a vital part of professional engineering, the programming portion teaches logic that is applicable to any other programming language, and the VEX robotics control system is used in other robotics competitions such as BEST Robotics. All necessary materials, including motors, gears, pulleys, wheels and axles, and microcontrollers will be available for student use during the academy.

Registration forms and full course descriptions will be available on Monday, March 3 at

[www.auburn.edu/cosam/roboticsacademy](http://www.auburn.edu/cosam/roboticsacademy)

#### For more information contact:

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# Activity of the Issue

## Marble Maze

### Materials:

- foam core board or cardboard
- a chair
- cardboard tubes
- poster putty
- string
- yarn
- fabric
- sandpaper
- bubble wrap (with little bubbles)
- construction paper
- masking tape
- marbles
- rubber ball
- ball of clay
- stopwatch
- ruler marked with inches

### What to do:

1. Try to make a maze for a marble to go down s-l-o-w-l-y.
2. Have a friend make a maze too so you can compare your designs and results. Make sure the mazes are the same size and have the same steepness.
3. Then race. Whoever's marble finishes LAST is the winner.
4. On your mark, get set, slow down!

### Extension:

1. Which materials worked best to slow down your marble?
2. Does the distance the marble travels affect how long it takes to finish the maze?
3. What changes to your designs did you make to slow your marble down?
4. Are there places in your maze where it travels especially fast or slow?
5. Why do you think that is?
6. How do you think gravity or friction is

affecting the speed of your marble?

7. What other materials can you think of that will slow your marble even more?
8. Do you think some types of balls will roll faster through your maze than others?
9. Choose one thing-that's the variable-and make a prediction.

This activity was developed by PBS.org. For more fun activities visit:  
<http://pbskids.org/zoom/activities/sci/marblema>



# Since the last issue

## High School AMP'd Results

### Junior Varsity

- 1<sup>st</sup> Place: Beaugard High School – Team Charlie
- 2<sup>nd</sup> Place: Beaugard High School – Team Delta
- 3<sup>rd</sup> Place: W.P. Davidson High School – Team Zulu

### Varsity

- 1<sup>st</sup> Place: Saint James School – Team Sierra
- 2<sup>nd</sup> Place: Hoover High School – Team Kilo
- 3<sup>rd</sup> Place: Beaugard High School – Team Bravo

For more information about AMP'd visit our webpage

[www.auburn.edu/cosam/ampd](http://www.auburn.edu/cosam/ampd)



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