Upcoming Events & Programs

SCORE Summer Camps
Registration now open!

SCORE (The Southeastern Center of Robotics Education) will be offering a variety of fun, educational, robotics programs this summer for rising 3rd – 9th graders. The SCORE center is a new initiative at Auburn University that serves to inspire and prepare future generations of STEM professionals by developing and delivering student robotics programs, online robotics resources, and professional development for educators.

A list of the upcoming SCORE camps follows:

<table>
<thead>
<tr>
<th>Course</th>
<th>Grades</th>
<th>Dates</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drone Camp</td>
<td>Rising 7th-9th</td>
<td>June 5th – 8th</td>
<td>Configure, fly, and program drones</td>
</tr>
<tr>
<td>Drone &amp; Aviation Camp</td>
<td>Rising 6th-9th</td>
<td>June 27th – 30th</td>
<td>Configure, fly, and program drones</td>
</tr>
<tr>
<td>Chaotic Robotics</td>
<td>Rising 7th-9th</td>
<td>July 24th – 28th</td>
<td>VEX robotics engineering and programming</td>
</tr>
<tr>
<td>Chaotic Robotics</td>
<td>Rising 7th-9th</td>
<td>July 31st – Aug 4th</td>
<td>VEX robotics engineering and programming</td>
</tr>
<tr>
<td>SCORE Camp</td>
<td>Rising 3rd-6th</td>
<td>July 10th – 14th</td>
<td>Introduction to robotics, engineering design, and programming</td>
</tr>
</tbody>
</table>

To register or for more information, visit [http://scoreau.org](http://scoreau.org) or contact TJ Nguyen at tcn0002@tigermail.auburn.edu.
Upcoming Events

Women’s Leadership Symposium
Thursday, May 4th 2017
Registration now open!

The 2017 SWSM (Society of Women in Sciences and Mathematics) Women’s Leadership Symposium will be held on Thursday, May 4th, 2017 at the Auburn University Hotel and Conference Center. The Marie W. Wooten distinguished speaker is Audrey Goins Brichi – retired former manager of diversity and inclusion in Chevron’s Office of Global Diversity Ombuds and University Partnerships.

To register or for more information regarding this event, please visit http://auburn.edu/cosam/swsm or contact Kristen Bond at Kristen.bond@auburn.edu or 334-844-5769.

The AU Science Café & Pub

Join us each month for a night of science, good drinks, tasty sweets, and great conversations! At the AU Science Café & Pub, you’ll have the opportunity to sit down and talk about new and exciting science and technology with scientists in our community, all the while relaxing in a great local food and drink venue. The event typically alternates between a “pub” version at Red Clay Brewery and a “café” version at Mama Mocha’s Coffee Emporium.

The event is FREE, open to the public, and is family-friendly whether hosted at Mama Mocha’s or Red Clay Brewery. No science background is required, and no question is too silly to ask! For more info, including parking directions and the event schedule, visit us online at http://auburn.edu/cosam/sciencecafe or contact Josh King at josh.king@auburn.edu.

Next Science Café/Pub Dates:
April 20th – “Tomorrow’s Lunch is Underwater” by Dr. David Cline @ Red Clay Brewery
May 25th – Dr. David Maurer @ Red Clay Brewery
Upcoming Events

2017 Core Teacher Training
Registration Opens April 3rd

Each summer, Auburn University offers core training for Project Lead The Way (PLTW) Engineering, Biomedical Science, Gateway, and Launch programs to train teachers how to effectively use PLTW curricula with their students. According to the PLTW network agreement, only trained PLTW teachers may teach the curriculum.

Core training provides teachers with the knowledge to utilize the PLTW technology, software and associated curriculum. Classes are taught by master teachers and affiliate professors who bring hands-on teaching experience to the classroom. PLTW pays significant attention to assessing the teachers’ readiness for the intensive two-week training. PLTW training courses at Auburn University this summer include:

- June 4 - 9: Gateway: Design and Modeling (DM)
- June 4 – 16: Principles of Biomedical Sciences (PBS)
- June 10: DM Retooling
- June 11 – 16: Gateway: Medical Detectives (MD)
- June 18 – 23: Gateway: Automation and Robotics (AR)
- June 18 – 30: Principles of Engineering (POE)
- June 18 – 30: Digital Electronics (DE)
- July 9 – 21: Human Body Systems (HBS)
- July 17 – 18: Launch – Classroom Training

* Computer science core training will be offered at the University of Alabama.

For more information, contact Dr. Jeff Gray at gray@cs.ua.edu.

For further information on registering:

https://www.pltw.org/our-programs/professional-development/core-training

For more information on Alabama PLTW visit:
http://auburn.edu/pltw

Mary Lou Ewald
Affiliate Director (Engineering, Biomedical, Gateway, and Launch)
334-844-5745
ewaldml@auburn.edu

Bonnie Wilson
Affiliate Assistant Director (Engineering)
334-844-4797
bonnie@auburn.edu

Dr. Charles Eick
Affiliate Assistant Director (Launch and Gateway)
334-444-2092
eickcha@auburn.edu

Josh King
Affiliate Assistant Director (Biomedical)
334-844-8123
josh.king@auburn.edu
Upcoming Events

Space still available for rising 5th-8th grade students!

Science Matters is a summer enrichment program for students in rising grades 1st – 8th 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, project-based 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!

There are still spaces available for rising 5th-8th graders. For more information or to download our registration form, please click on: www.auburn.edu/cosam/sciencematters

Available Course Offerings by Grade

<table>
<thead>
<tr>
<th>Week</th>
<th>1st - 2nd Grade</th>
<th>3rd - 4th Grade</th>
<th>5th - 6th Grade</th>
<th>7th - 8th Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 5 - 9</td>
<td>FULL</td>
<td>FULL</td>
<td>Secret Formulas</td>
<td>No Offering</td>
</tr>
<tr>
<td>June 12 - 16</td>
<td>No Offering</td>
<td>No Offering</td>
<td>Mystery at the Museum</td>
<td>No Offering</td>
</tr>
<tr>
<td>June 19 - 23</td>
<td>FULL</td>
<td>FULL</td>
<td>Off the Grid</td>
<td>No Offering</td>
</tr>
<tr>
<td>June 26 - 30</td>
<td>FULL</td>
<td>FULL</td>
<td>Balloon Poppers</td>
<td>Adept at Adaptation</td>
</tr>
<tr>
<td>July 17 - 21</td>
<td>FULL</td>
<td>FULL</td>
<td>Pondering Potter</td>
<td>No Offering</td>
</tr>
<tr>
<td>July 24 - 28</td>
<td>FULL</td>
<td>FULL</td>
<td>FULL</td>
<td>No Offering</td>
</tr>
</tbody>
</table>

To add your child to our waiting list for our 1st-4th grade classes, please click on: www.auburn.edu/cosam/sciencematters

Need more information? Contact Kristen Bond at 334-844-5769 or Kristen.Bond@auburn.edu
New Auburn-Opelika iNaturalist Program
Join now to become a citizen scientist!

Help us document the biodiversity of the Auburn University campus and Auburn-Opelika area. The Auburn University Museum of Natural History (http://aumnh.org/) created this project to give AU students, staff, faculty, visitors, and area residents an opportunity to share their observations of the plants and animals that share campus and our local area with us. Please join us and share what you see!

For the on-campus program, visit: http://www.inaturalist.org/projects/auburn-university-campus-biodiversity-survey

For the Auburn-Opelika area program, visit: http://www.inaturalist.org/projects/auburn-opelika-biodiversity-survey

For questions, contact Michael Barbour at mbarbour@auburn.edu.

High School Research Opportunities
Wada Lab mentoring students this summer and fall

Are you interested in doing a science fair project this summer and fall? The lab of Dr. Haruka Wada is mentoring students this summer and fall who are interested in gaining scientific research experience. Interested students must be rising 10-12th graders having had at least one Biology course with a B or higher. The time commitment is 6+ weeks, depending on the project. The Wada Lab’s research interests include:

- How cellular and organismal stress responses are integrated
- How mercury affects brain function in songbirds
- The physiology of stress tolerance

To join, consult with your science teacher and then contact Dr. Haruka Wada at hzw0024@auburn.edu. The lab website can be found at https://www.wadalaboratory.com.
Activity of the Issue

Shoebox Maze
(Phototropism and being hungry for light)

Materials:
• Shoebox
• A few pieces of extra cardboard
• Scissors
• Tape
• Small potted plant (bean plants work best)

What to do:
1. Cut a large hole at one end of the shoebox.
2. Cut two pieces of cardboard in such a way that they are the same height as the shoebox and half the width of the shoebox.
3. Divide the box into thirds and tape the cardboard pieces down, on the left side of the first third of the box, the other on the right side of the second third of the box. Once taped, it should look like the image below.
4. Place the small potted plant in the shoebox opposite the hole cut in the box. Tape the plant down.
5. Water the plant, close the box, tape it shut, and place it near a sunny window. In about 4 or 5 days, open the box and notice how the plant navigates your maze towards the light!

How Does It Work?
The plant here is demonstrating phototropism which is the growth of an organism in response to stimulus from a light source. Organisms can express “positive” phototropism (growing towards the light) as seen in many plant shoots or “negative” phototropism (growing away from the light) as seen in many plant roots. This process is mediated by a chemical in the cells of a plant called “auxin” that helps the plant find the direction to grow for photosynthesis or to help guide the directional growth of roots for nutrients.

Make It An Experiment
The project above is a DEMONSTRATION. To make it a true experiment, you can try to answer these questions:

• Do different colored lights affect the plant growth?
• Does a different shaped maze affect the plant growth?
• Do different plants respond differently to the shoebox maze?
Since the last issue

Elementary Science Olympiad

Overall Winners
1st – Ogletree Elementary School Team A
2nd – Mt. Gap Elementary School
3rd – Ogletree Elementary School Team B
4th – Montgomery Catholic Preparatory School

For more information about Science Olympiad visit our webpage
www.auburn.edu/cosam/scienceolympiad

GEARSEF

Senior Division Best of Fair
1st – Rahul Lall – Auburn High School
2nd – Alexis Jones – Auburn High School

Junior Division Best of Fair
1st – Carrie Smith – Beverley Magnet School
2nd – Christian Leverette – Beverley Magnet School
3rd – Julian Vilardi – Wetumpka Middle School

For more information about GEARSEF visit our webpage
www.auburn.edu/cosam/gearsef

Engaging More Community Connections

E=mc²

131 Sciences Center Classrooms Bldg.
315 Roosevelt Concourse
Auburn University, AL 36849
auburn.edu/cosam/outreach
facebook.com/cosamoutreach
twitter.com/cosamoutreach
instagram.com/cosamoutreach
Phone: 334-844-7449
Fax: 334-844-5740

For more information about any of our programs visit:
www.auburn.edu/cosam/outreach
Or call us at 334-844-7449

Follow COSAM Outreach on social media
for updates, pictures, and chances to win prizes!

facebook.com/CosamOutreach
twitter.com/CosamOutreach
instagram.com/CosamOutreach