# LASER

January 2024

#### LSTA NEWSLETTER



Louisiana science educators dedicated to the advancement of scientific literacy at all levels, and encouraging lifelong learning.

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#### LSTA BOARD AND REGIONAL REPRESENTATIVES

<u> </u>		_
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### President's Message

Members of Louisiana Science Teachers Association,

I want to wish each of you a very Happy New Year! As we jump back into the swing of things, be sure to keep an eye out for our LASER newsletter which will be sent to your inbox monthly. There are some amazing professional development opportunities and resources featured this month. Be sure to check these out! Monthly issues of the LASER allow LSTA members to get up to date information on these time sensitive opportunities.

The LSTA Board will hold its first meeting for 2024 on Saturday, January 20th in Baton Rouge. During this meeting your regional representatives will be planning session submissions for the NSTA National Conference which will be held in New Orleans on November 6-9, 2024. Please save this date and plan on joining us for an extraordinary learning event where you can engage in best practices and strategies alongside other science educators from across the nation. Don't forget that LSTA has partnered up with NSTA and created a survey designed to gather feedback on educators' professional learning interests for the upcoming NOLA24 conference. If you haven't already, you can complete the survey <a href="here">here</a>.

LSTA is working diligently to ensure the voices of science educators from around the state are being heard. LSTA has representatives in the following organizations: Barataria-Terrebonne National Estuary Program (BTNEP)- Nicole Cotten, Louisiana Science, Technology, Engineering, and Mathematics Advisory Council (LaSTEM)- Bianca Deliberto, Louisiana Teacher Leader Advisor (TLA)- Kellie Bouquet, Cecelia Gillam, Bianca Deliberto and Samantha Mendenhall, Quality Science and Math Council (QSM)- Bianca Deliberto and Nathan Cotten, and Louisiana Environmental Education Committee (LEEC)- Pierre LaCaze. In some cases, our representative is the only science educator to serve on the committee.

Also, please consider nominating a K-6th grade science teacher for the Presidential Award for Excellence in Mathematics and Science Teaching. I know there are wonderful teachers throughout our state that would be most deserving of the nomination, so please think about submitting their information for this most prestigious award. The PAEMST Awards are among the highest honors a teacher of math or science may receive. Find more information on the award as well as information for nominating a teacher <a href="here">here</a>. The deadline to nominate a teacher is January 8, 2024.

Remember, your voice in science education is valued and important. As science educators, you play a critical part in the success of all our students here in Louisiana. Thank you for all your do every day! Let's kick 2024 off to an excellent start!

Sincerely,

*Dunca Duoino* Dr. Bianca Deliberto

### LSTA News/Awards

#### Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)

Presidential Awards Celebrates 40 Years Since 1983, the United States government has been honoring outstanding educators with the Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST). The program now extends to teachers of technology and engineering. On Friday, November 3, 2023, the most recent State Finalists were honored at a recognition luncheon on the Manship Deck at the USS KIDD Veterans Museum in Baton Rouge. NSTA President, Dr. Julie Luft, was in attendance and spoke to the group expressing her congratulations and shared some personal reflections.

They were joined by numerous special guests including PAEMST Alumni. The science honorees were Amy Douglas, Captain Shreve High School in Shreveport; Angela Lacey Hoosier, Buckeye High School in Deville; and Dr. Katherine Schilling, Holy Cross School in New Orleans. LSTA President Dr. Bianca Deliberto presented framed certificates to the State Finalists.











PAEMST alumni from left to right Robbie Evans (2020), Andrea Walker (1997), Lai Cao (2007), Michelle Blanchard (2002), Sue Ellen Lyons (1993), and K. Renae Pullen (2008)



#### THE IGNITE PROJECT

#### WHAT IS THE IGNITE PROJECT?

How would you like to ignite a passion for computer science in your K–5 elementary students? The Ignite Project aims to train 1,000 teachers statewide to use computer science fundamentals to enrich teaching practices. This inclusive program invites both experienced educators and newcomers, offering 40 hours of professional development and stipends to the participants.

#### The Teacher Experience:

- Increase CS expertise using Code.org, Scratch, ScratchJr, Micro:Bits, Robots, and more!
- Develop your students' computational thinking skills.
- Training includes some in-person and some virtual meetings.
- Stipends and materials kits provided.
- Develop artifacts for use in the classroom.
- 40 hours of professional development.

#### The Ambassador Experience:

Receive an additional stipend for hosting this PD for other teachers in your school/district. Additional details including how you can apply are available on our website.

#### The Student Experience:

- Enhance coding skills.
- Improve cyber safety and responsible technology usage.
- · Develop reasoning skills.
- Strengthen communication and soft skills.



#### **About Us**

The Capital Area STEM Network Center (CASN) is one of nine STEM leadership entities strategically positioned across Louisiana. It was established by the Louisiana Board of Regents in 2020 and is hosted by the LSU Gordon A. Cain Center for STEM Literacy. For more news and information about CASN, please visit capitalareastem.org.







Are you interested in using enriching projects in K-5 that also introduce basic computing concepts and processes? Are you interested in earning a stipend?

Registration is still available for the Ignite Project- a statewide initiative to improve teacher skills and confidence in using CS in the elementary environment. We are looking for 1000 teachers to join us and develop a community to support this endeavour!

If you are interested in becoming an Ambassador for your school or district, or participating as a teacher in the Ignite Project, please contact Kaleb Gardner at kgard22@lsu.edu for more information.

Our website is <a href="https://capitalareastem.org/ignite/about.html">https://capitalareastem.org/ignite/about.html</a>



#### K-5 Free Computer Science Teacher Trainings

The LDOE has partnered with the Capital Area STEM (LASTEM Region 2) Center to offer the <u>Ignite Project</u>, a FREE hybrid K-5 computer science teacher training. This training will be agnostic of a curriculum or specific computer science provider's program. The training will focus on the fundamentals of computational thinking, emphasize interactive project based learning techniques, and introduce teachers to open source resources from <u>Code.org</u>, Scratch Jr., Micro:bit, and robotics. For more information or to register visit the <u>Ignite Project's web page</u>.

#### 6-12 Free Virtual Computer Science Praxis Exam Teacher Training

The LDOE has partnered with the Northshore Regional STEM (LASTEM Region 9) Center to offer the <a href="Energize Project">Energize Project</a>, a FREE virtual 6-12 computer science praxis exam teacher training. This training will be agnostic of a curriculum or specific computer science provider's program. The training will have four cohorts that start on March 19 running through May 13. A fifth hybrid cohort will occur in the first week of June on Southeastern Louisiana University's campus. For more information or to register visit the <a href="Energize Project's web-page">Energize Project's web-page</a>.

#### Computer Science K-12 Standards Writing Committee

At the December meeting of the Louisiana Board of Elementary and Secondary Education approval was granted to initiate the first ever, Louisiana Student Standards for Computer Science K-12 writing committee. The <u>application</u> to participate is open to all interested Louisiana educators, district staff, administrators, parents, 7-12 students, and community members. Applications are open and will close Friday, February 5, 2024 at 4 p.m. CST. Selected participants will be notified in April.

Please contact STEM@la.gov with questions.



#### What is DNA Day?

It is a celebration of the discovery of DNA's double helix in 1953 and the successful completion of the Human Genome Project in 2003, which gave us the ability to read a complete genetic blueprint for building a human being.

#### What is the ASHG DNA Day Essay Contest

It is a contest open to high school students around the world. Each year, students are asked to examine, question, and reflect on an important topic in genetics by writing a 750-word essay. Human genetics experts evaluate each submission and may even provide feedback to help you improve. Submission is free, and there is a chance to win up to \$1,000!

#### **ASHG DNA Day Essay Contest Information:**

- Prizes: Three winners will receive up to \$1,000 and a matching lab equipment grant, 10 honorable mentions will win \$100 each. All winners and honorable mentions are announced on the Essay Contest website, ASHG's social media platforms, and in their local media outlets.
- Eligibility: All high school students
- Submission Cost: FREE
- Submission Process: Teachers must submit student essays online at the link the right.
- Due Date: Early March



bit.lv/3S2QolW



Connect with a human genetics expert for help on your essay, or any genetics-related question, through the ASHG Genetics Engagement and Education (GENE) Network. The GENE Network is a FREE resource made up of human genetics experts from around the world who have volunteered to answer your questions. Connect today follow the link/QR Code to the right.

For all additional ASHG resources about the wonders of human genetics and genomics, including videos, games, and handouts, visit Discover Genetics at the link/QR Code to the right.



bit.ly/3rcaFuD



bit.ly/3UKhl0s

National World War II Museum STEM Innovations Summer Teacher Workshop 2024

K–12 educators are invited to apply to attend our 2024 STEM Innovations Summer Teacher Workshop. Classroom teachers, building master teachers, curriculum specialists, and administrators are welcome!

#### Topic:

World War II, Women, and STEM

Dates:

July 14-20, 2024

Deadline:

January 29, 2024



#### Objectives:

By the end of this week, educators will have a deeper understanding of World War II and will be able to implement the use of the STEM Innovations Curriculum (Little Engineers, Real World Science, and STEM Corps Live!) into their own classrooms. This includes learning about the role women played in STEM during the war. Additionally, educators will gain pedagogical tools and strategies to not only strengthen their teaching of STEM subjects but also to integrate literacy practices and social studies into science investigations with students.

#### **Details:**

Educators will spend time in whole groups sessions as well as in cohorts based on the grade band in which they teach (Little Engineers K–4, Real World Science 5–8, STEM Corps Live! 9–12). There will be time to explore the Museum's galleries as well as field trips to support STEM/WWII learning. Free time can be spent exploring the great city of New Orleans.

#### **Educators will receive:**

- Arranged airfare OR a reimbursement for travel if within driving distance
- Transportation from and to the airport if flying/paid parking if driving
- Double-occupancy rooming at The Higgins Hotel (across the street from the
- Museum) [It is possible to pay for educators to pay for half if they would like a single
- room]
- All breakfasts, lunches, and two dinners
- Two excursions/field trips
- Curriculum, books, and all materials

Questions: LaToya Williams: <a href="mailto:latoya.williams@nationalww2museum.org">latoya.williams@nationalww2museum.org</a>





#### **About the Professional Development**

Science and social studies teachers will participate in hands-on fieldwork and learn skills for teaching English Language Learners. Teachers will explore the historical and ecological changes in the Pontchartrain Basin due to climate change and its effect on the environment. In addition to the summer workshop, teachers will participate in two (compensated) virtual trainings throughout the following year.



#### **Program Highlights**

- Learn skills and strategies for teaching ELLs
- Work alongside subject matter experts
- Explore the different habitats in the basin and examine the changes that have occurred
- Have facilitated, guided lesson plan development
- Receive continuing education credit
- All lodging, meals, and activities are included at no cost to the participant
- \$300 in participant stipends (per year)



#### Registration

#### Dates:

- Northshore May 30 June 2, 2023
- Southshore July 23-26, 2024

To register: https://lsu.qualtrics.com/jfe/form/SV\_3OuXBGbZgQSlpcy Due to limited spaces, the priority deadline is March 1, 2024

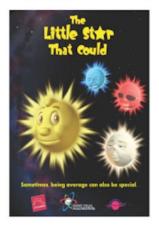




# Join Us For An Experience That's OUT OF THIS WORLD!

#### **JANUARY 2024**

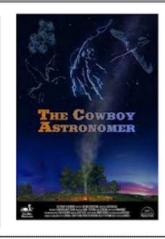
\*Special programming on Jan. 6 will replace scheduled shows



#### The Little Star That Could

Join Little Star, an average yellow star in search for planets of his own to protect and warm. Along the way, meet other stars, learn what makes each star special, and discover that stars combine to form star clusters and galaxies.

Running time: 35 minutes



#### The Cowboy Astronomer

Come roam the range and star gaze the cowboy way in this light-hearted planetarium show narrated by cowboy humorist Baxter Black. From the depths of the countryside, free from light pollution follow the Milky Way and star hop from Polaris to the Pleiades.

Running time: 40 minutes

#### Dream to Fly

Since the beginning of history, people have dreamed of flying. Open your hearts to new ideas about flight, and learn how generations of dreamers pursued the ancient impulse that has taken us from the ground to the stars.

Running time: 35 minutes





#### Voyage to Distant Worlds

Take a tour of the planets in our Solar System and discover facts you never knew about our neighboring worlds. Voyage to Distant Worlds is a production of the Casper Planetarium.

Running time: 38 minutes



#### LASER BEATLES

Be a part of Beatlemania as the group's most popular hits are brought to life through a dazzling laser light display! TWIST and SHOUT to your favorite tunes and remember the hits of YESTERDAY...

among many others!

Running time: 30 minutes



#### Admission:

E-mail <u>hglorioso@kenner.la.us</u> or call 504-468-7231 for information and group rates.

Adults \$6.00 per show Children/Seniors \$5.00 per show

Multi-show packages available

\*Children 2-12 years \*Seniors 60 and over

SHOW SCHEDULE SUBJECT TO CHANGE!

#### Schedule:

Appointment Only: Tues-Fri Schools/Camps/Groups Call 504-468-7231 for reservations.

General Public: Saturdays Only
Box Office opens at 10:45 am

The Little Star That Could: 11:00 am
The Cowboy Astronomer: 12:00 pm
Dream to Fly: 1:00 pm
Voyage to Distant Worlds: 2:00 pm
Laser Beatles: 3:00 pm

Kenner Planetarium 2020 Fourth Street Kenner, Louisiana 70062 www.kenner.la.us 504-468-7231

Rise and Thrive with Science:
Teaching PK-5 Science and Engineering

Rise and Thrive with Science applies the findings from the BOSE report Science and Engineering in Preschool Through Elementary Grades: The Brilliance of Children and the Strengths of Educators (2022). This guide will aid practitioners in understanding and implementing evidence-based instructional approaches in kindergarten through fifth-grade classrooms. These approaches engage children from an early age in doing science and engineering and help to make science learning more meaningful, equitable and enduring.



WE NEED
YOUR INPUT!

In order to best meet the needs of conference attendees, we have partnered up with NSTA and created a survey designed to gather feedback on educators' professional learning interests for the upcoming NOLA24 conference.

Your feedback will be invaluable in helping us to develop relevant and engaging strands and themes for the conference.

You can complete the survey <u>here</u>.

The survey window will close JANUARY 8, 2024 and in order to ensure your input is received you should complete this as soon as possible.

We appreciate you taking the time to assist us with this part of the conference process.



PROVIDING HIGH-NEED CURRICULA & TRAINING HIGH-NEED EDUCATORS

AT NO COST TO HIGH-NEED SCHOOLS







About:

LSU's BRBYtes program

offers 7 hands-on,

project-based,

inter-curricular computing

certification courses

designed for both college
and career bound students
and count towards many

Jumpstart pathways as

well as +5% to SPS score

for offering STEM courses.

BATON ROUGE:
BRINGING YOUTH
TECHNOLOGY,
EDUCATION AND
SUCCESS

#### Courses Offered:

- Introduction to STEM Pathways & Careers
- Survey of Computer Science
- Introduction to Computational Thinking.
- Interactive Computing
- Data Manipulation and Analysis
- Cybersecurity
- Programming for STEM

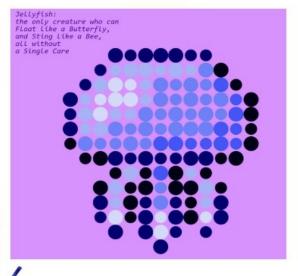


ADDRESS THE MATHEMATICS COMPUTING AND EQUITY GAPS OF TODAY

CsforAL.



SCIENTISTS, DATA ANALYSTS, AND DIGITAL CREATORS OF TOMORROW



TEACHERS MAY BE COMPENSATED FOR THEIR TIME SPENT IN TRAINING AND PD AND YOUR DISTRICT MAY BE COMPENSATED PER STUDENT ENROLLED IN SELECT COURSES. EMAIL INFO@BRBYTES.ORG ASAP TO RESERVE A SPOT AT THE TWO WEEK 2024 SUMMER TEACHINER TRAINING.

A SEGMENT OF THE CODE A STUDENT WROTE TO DRAW THE JELLYFISH

»fish = combined[white, lb2, lBlue, medBlue, darkblue, black]

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--Darkblue

odarkblue = combined[colored(dotSize4(0,0), rgb(4, 0, 111)), colored(dotSize4(1,0), rgb(4, 0, 111)),

colored(dotSize5(2,0), rgb(4, 0, 111)), colored(dotSize5(3,0), rgb(4, 0, 111)), colored(dotSize5(-1,0), rgb(4, 0, 111)),

colored(dotSize4(-2,0), rgb(4, 0, 111)),



Explore More: WWW.BRBYTES.ORG





# Save the Date for WETShOP 2024

July 14-19, 2024

LDWF Marine Research Lab, Grand Isle, LA

WETshop is a week long workshop for teachers (formal and informal) to learn about Louisiana's coastal wetlands and become wetland stewards. To learn more about this program visit: wlf.louisiana.gov/page/for-teachers

Registration Opens: January 22, 2024



For more information please contact: Lindsay Seely (225) 765-2375 Lseely@wlf.la.gov



#### 2024 Louisiana Energy Education Workshops

Click on a date below to register!

#### January 13, 2024

Zoom Workshop Details provided once registration is complete.

#### February 28, 2024

LSU AgCenter Botanic Gardens Conference Center 4560 Essen Lane Baton Rouge, LA 70809

#### March 11, 2024

SOWELA Technical Community
College
Jennings Multi-Purpose Room
3820 Sen J. Bennett Johnson
Avenue
Lake Charles, LA 70615

#### For The Attendees:

- FREE to attend, thanks to Energy Office support!
- Breakfast and Lunch Provided
- Substitute Reimbursement provided
- Science of Energy Kit delivered post-workshop
- Teaching tips and creative ideas
- Louisiana standards aligned curriculum



#### Questions:

Contact Wendi Moss at wmoss@need.org or call 1-800-875-5029

#### About the National Energy Education Development Project

The NEED Project designs and delivers teacher- tested educational materials, evaluation techniques and tools, recognition of student achievement, and professional development for educators. NEED materials and training programs provide comprehensive, objective information about the scientific concepts of energy and the sources of energy-their use and their impact on the environment, the economy and society.



THE SPONSOR: Louisiana State Energy Office

#### Happy New Year from LASTEM!

In 2023, the LASTEM network saw substantial growth in programming, partnerships, and external funding at the Regional STEM Centers. The collective growth has played a crucial role in raising awareness within their respective communities about the vital connection between STEM education and workforce opportunities across the state. Our most recent achievement occurred at our 4th quarter council meeting in Houma, marking a significant milestone for STEM education in Louisiana.

The LASTEM council members voted to approve the following first ever statewide definition of STEM. "STEM education, as defined by the Louisiana STEM Advisory Council (LASTEM), is an integrated approach to learning about scientific, technological, engineering, and mathematical concepts and processes as well as their application in careers and in life.

STEM education cultivates critical thinking, analysis, and collaboration skills applicable in real-world contexts, which is critical for all Louisiana citizens. It emphasizes dynamic, hands-on, experiential learning across the STEM spectrum, enabling students to creatively solve real-world problems through innovative design thinking. Skills developed through STEM prepare learners for success by providing authentic experiences relevant to 21st-century life and work."



#### APPLY FOR A YEAR-LONG SCIENCE PROJECT ENDING WITH PARABOLIC FLIGHT

Are you a devoted 6th–12th grade classroom teacher passionate about STEM and space sciences? The Embedded Teacher Program (ETP) annually selects ten teachers in two cohorts of five for a year-long immersive space science project culminating in a parabolic flight. ETP prioritizes Title I, rural, and underrepresented communities. Applicants should have over 5 years of STEM teaching experience, a dedication to project-based learning, district support for innovation, and a willingness to engage with stakeholders.

Selected participants receive cost coverage for workshop, lodging, parabolic flight, and travel related to the flight. Apply by March 1, 2024, for the 2024 cohort. Selection notifications will be sent by April 1, 2024, with the workshop scheduled for May 23–25, 2024, at UT Austin Center for Space Research. For inquiries, contact <a href="https://spaceforteachers.org/">https://spaceforteachers.org/</a>

#### PRESIDENT'S ENVIRONMENTAL YOUTH AWARDS

The PEYA program promotes awareness of our nation's natural resources and encourages positive community involvement. Since 1971, the President of the United States has joined with EPA to recognize young people across the U.S for protecting our nation's air, water, land and ecology. Up to two awards- one for Grades K-5 and one for Grades 6-12- will be selected from each of Epa's 10 regions for national recognition.

Recognition: EPA gives a Presidential plaque to the award winners.

# **\$EPA**

#### Eligibility Requirements:

- Project is completed while the applicant(s) is in kindergarten through 12th grade.
- Applicant(s) is a citizen of the United States or its territories or has been lawfully admitted for permanent residency. Applicant also resides in a U.S. state, territory, or tribal land.
- Project is sponsored by at least one adult 21 years of age or older.
- Project started during the 2023 calendar year and had activity during the 2023 calendar year. As long as a project had activity during the 2023 calendar year, a project initiated prior to 2023 is also eligible for consideration.
- Projects must include an environmental stewardship component.

Applications are due January 15, 2024.

Projects recognized through the PEYA program are developed by young individuals, school groups, summer camps, and other youth organizations to promote environmental stewardship.

To apply, visit: <a href="https://www.epa.gov/education/presidents-environmental-youth-award">https://www.epa.gov/education/presidents-environmental-youth-award</a>

#### PRESIDENT'S INNOVATION AWARD FOR ENVIRONMENTAL EDUCATORS

EPA recognizes outstanding K through 12th grade teachers who integrate environmental education through innovative, place based and experiential learning approaches and use the environment as a context for learning in public school programs across the country.

Recognition: Teacher awardees will receive an award of up to \$2,500 to be used to further the recipient's professional development. The teacher's local education agency will also receive an award of up to \$2,500 to fund environmental educational activities and programs.

#### Eligibility Requirements:

- Teach K-12 on a full-time basis in a public school that is operated by a local education agency, including schools funded by the Bureau of Indian Education.
- Hold a current teaching license from the state (or valid reciprocity from the state for a license from another state).
- Have at least 5 years of K-12 teaching experience, including at least 3 years of teaching an environment-based curriculum or environmental education.
- Anticipate a classroom teaching assignment involving environmental education for the upcoming school year.
- Be a citizen of the United States, its territories or possessions, or lawfully admitted to the United States for permanent residency.
- Have not been a recipient of the award in the past 5 years.

#### Applications are due January 15, 2024.

The Presidential Innovation Award for Environmental Educators program is sponsored by the White House Council on Environmental Quality (CEQ) in partnership with the U.S. EPA.

To apply, visit: <a href="https://www.epa.gov/education/presidential-innovation-award-environmental-educators">https://www.epa.gov/education/presidential-innovation-award-environmental-educators</a>



#### Louisiana Association of Science Leaders' Corner

Are you a district science supervisor, science content specialist, science master teacher, Teacher Leader or science coach?

If so, consider becoming a member of LASL, the affiliate of the National Science Education Leadership Association (NSELA). Watch for information on how to become part of LASL and upcoming Louisiana opportunities.



In spring 2023, the Smithsonian Science Education Center contracted with Gallup to conduct a study of U.S. K-12 teachers and school administrators, as well as teachers of students in comparable grade levels in four peer countries: Brazil, Canada, France and India. The goal was to gauge attitudes toward, and demand for, education and resources related to sustainable development. In the United States, educational resources exist within school and district curricula, which must adhere to state standards.

Internationally, however, different countries and provinces often have a National Curriculum, typically directed by their Ministries of Education. This study was an outgrowth of the Smithsonian Science Education Center's Smithsonian Science for Global Goals project, which aims to improve STEM Education for Sustainable Development for youth around the world. Download the report to read the findings. You can access the report <a href="here">here</a>.

#### Caring for our Coast Gulf Region Grants

Restore America's Estuaries is excited to once again partner with CITGO to facilitate the Caring for our Coast Gulf Region Grants. The goal of this program is to support organizations and groups hosting locally based volunteer events in the Gulf of Mexico region.

The deadline to apply for consideration is 11:59 PM Pacific on January 31st, 2024. The total funding available for the grant program is \$44,000 with a maximum of \$4,000 per grant. Projects must be completed between February 1st and August 23rd, 2024.





The NOAA Fisheries Southeast Regional Office is now seeking applications to the FY24 Gulf of Mexico Bay-Watershed Education and Training (Gulf B-WET) competition. The FY24 Notice of Funding Opportunity can be found at <u>Grants.gov</u> under funding opportunity number: NOAA-NMFS-SE-2024-2008255, or at the following direct link: <a href="https://grants.gov/search-results-detail/350934?showPackages=1">https://grants.gov/search-results-detail/350934?showPackages=1</a>.

Applicants should apply through <u>Grants.gov</u>. Applications must be received by 11:59 p.m. Eastern Time on February 5, 2024 to be considered for funding. An <u>informational webinar</u> about the FY24 Gulf B-WET funding announcement will be held via Google Meet on Wednesday, December 6, 2023 from 9-10 am CT | 10-11 am ET. Join here: <a href="https://meet.google.com/kik-qtem-ezz">https://meet.google.com/kik-qtem-ezz</a>.

The Gulf B-WET program is an environmental education program that promotes place-based experiential learning for K–12 students and related professional development for teachers in the five Gulf states. Projects supported by this funding opportunity will develop or promote <u>Meaningful Watershed Educational Experiences</u> (<u>MWEEs</u>). The MWEE is a learner-centered framework that focuses on investigations into local environmental issues, leads to informed action, and increases environmental literacy. Specifically in FY24, the Gulf B-WET funding opportunity includes the following priorities under which an application can be submitted:

- Professional Development for Teachers related to Meaningful Watershed Educational Experiences: supports high quality professional development for teachers allowing them to gain confidence in the value of MWEEs and strategies for conducting MWEEs with students (\$100,000 ceiling per award covering a period of up to 24 months.)
- Exemplary Programs combining Teacher Professional Development with Meaningful
  Watershed Educational Experiences for their students: supports professional development for
  teachers and teacher implementation of the MWEE with students such that students investigate
  environmental issues, identify actions to address those issues, and act as stewards for
  watersheds and related ocean and coastal ecosystems (\$100,000 ceiling per award covering a
  period of up to 24 months.)
- Systemic Meaningful Watershed Educational Experience Implementation: supports
  implementation of systemic MWEEs which reach the entire student population in one or more
  grades within a school district (\$150,000 ceiling per award covering a period of up to 24
  months.)

The Gulf B-WET funding announcement emphasizes our strong commitment to expanding the participation of marginalized communities in watershed education and is interested in projects that partner specifically with organizations and institutions that serve marginalized groups, particularly minority communities. It continues to suggest that the MWEE educational framework can contribute to one of the most pressing economic, social and environmental issues of today - climate change - by directly fostering climate knowledge and competencies to contribute to climate solutions.

Eligible applicants are K-12 public and independent schools and school systems, institutions of higher education, nonprofit organizations, state or local government agencies, interstate agencies, and Indian tribal governments. Applicants may be physically located in any U.S. state; however, education projects must target teachers and/or students located in any part of the five Gulf of Mexico states which are Texas, Louisiana, Mississippi, Alabama, and Florida.

More information about the NOAA B-WET program and previous awards can be found at the <u>Gulf B-WET program website</u> and through the <u>Gulf B-WET highlight video</u>. Contact Amy Clark (amy.clark@noaa.gov)



Use Learning Blade to expose your students to STEM! Recent studies have shown only 29 percent of Gen Z students cite STEM jobs as their first career choices, despite 75 percent expressing interest in the subject academically. If students have more exposure to STEM in middle and high school, they are more than TWICE as likely to pursue a STEM job or STEM major in college!

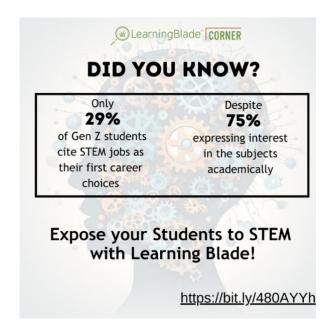
Learning Blade is the perfect tool to expose students to these careers with over 400 online lessons that connect your students to more than 100 STEM and Computer Science careers!

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"I live and teach in a very rural area so most students are only exposed to a handful of career paths. I want to expand my student's ideas of what they are capable of doing and Learning Blade helps me to do that. I have had several students tell me that Learning Blade has taught them about jobs that they didn't even know existed."

Sidney Spinks, Teacher, Block High School



SAME (Southern Association of Marine Educators) annual meeting registration is now open!

January 26-28, 2024 | Gulf Shores, AL

The SAME Annual Meeting will take place in January at The Learning Campus at Gulf State Park in Gulf Shores, AL.

SAME will cover most food costs and all of on-site lodging. More travel information is provided in the PDF below. For best results, open the PDF in a new tab to download.

If you have any questions, contact your <u>officers</u>
Register Here:
Travel Information and Agenda

The South Louisiana Wetlands Discovery Center will host Terrebonne Parish's 14th annual World Wetlands Day celebration on Thursday, February 1st and Friday, February 2nd from 8:45 a.m. to 3:15 p.m. at the Bayou Terrebonne Waterlife Museum in Downtown Houma.

This educational event will include hands-on activities with coastal experts and a tour of the Bayou Terrebonne Waterlife Museum. School visits will begin at 8:45 a.m., and the event will be open to the public on Thursday, February 1st from 2:30 p.m. to 3:15 p.m. Terrebonne Parish's 2024 World Wetlands Day is made possible by funds raised by the Rougarou Fest. Last year, the Rougarou Fest Woodard Awardee was LSTA Treasurer, Nathan Cotten The Woodard Award recognizes an individual for his or her work to preserve, protect, restore, and educate on coastal Louisiana



At the end of December, 16 teachers and their children converged on LDWF Research Lab at Grand Isle to do a deep dive into the history, ecology, and culture behind the Louisiana Oyster with Sea Grant.

Through a series of design challenges, activities, and brainstorming sessions the group explored the animal's past, present, and future. Teachers even got to put on chest waders and check the lines at the Voisin Oyster Hatchery to see a new way that oysters are being grown. And of course, oysters were on the menu for dinner.











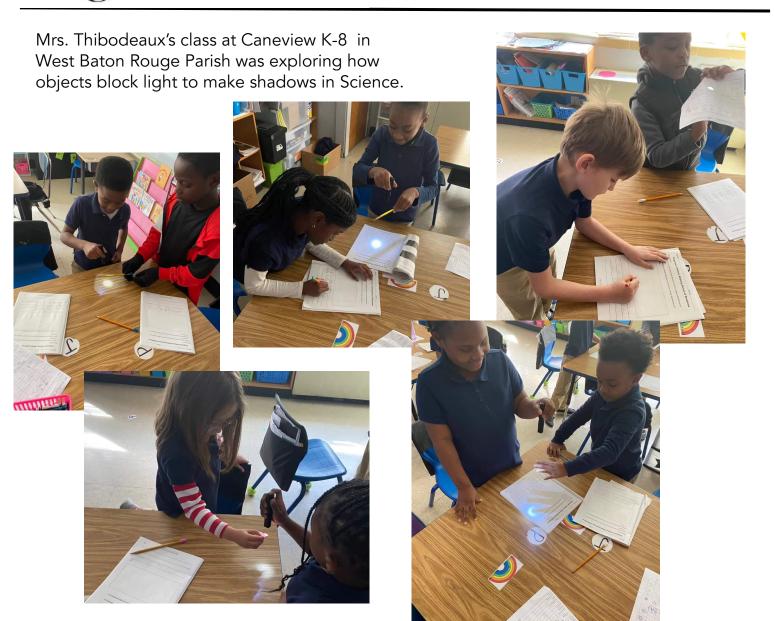
Louisiana Sea Grant hosted a Wetland Day field trip in the tight-knit community of Phoenix on November 10th. Over 150 K-12 students, 31 teachers and administrators, as well as family and members of the community engaged in hands-on, place-based learning about the importance of their local wetlands.

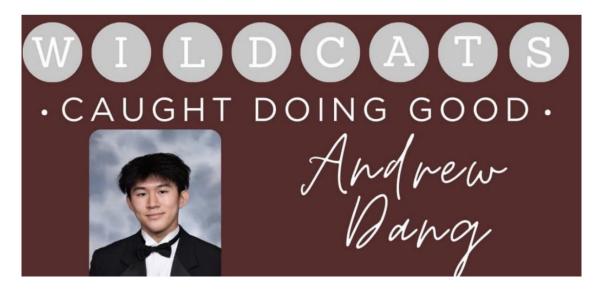
They participated in activities showing how wetlands act as a sponge to protect our water. They conducted their own water quality tests, identified macroinvertebrates they caught off the dock, acted as city planners when trying to solve the problem of coastal land loss, and took a ride on an air boat through the marsh! This program was made possible by funding from the NASEM Gulf Research Program.











Central High School's Andrew Dang from the Class of 2023 received a pre-engineering Gold Seal Scholarship from LSU.

He is one of only 10 students who has earned this achievement.



Yvette Hill, physics, chemistry, math, and robotics teacher, STEM Club Sponsor, and Bulldog Bytes Robotics Team Coach at Springfield High School, and her Bulldog Bytes Robotics Team hosted "Christmas in the Swamp Tournament", a Vex Robotics Competition, at their school on December 9. Bulldog Bytes is in its second year in the VRC, expanding from two high school teams last year to six teams this year, with four at the high school level (Team 22023) and two at the middle school level (Team 23024).

Ms. Hill and her team hosted 31 VRC teams from around South and Central Louisiana at this huge competition. Bulldog Bytes Team 22023B, Pollywogs, was awarded the Excellence Award at the tournament, Bulldog Bytes' first ever Excellence Award. According to VRC, "The Excellence Award is the highest award presented in the VEX Robotics competition. This award is presented to a team that exemplifies overall excellence in building a high-quality robotics program." Winning the Excellence Award qualified team 22023B for the Louisiana State VRC Tournament in Pineville in March, as well as earned them an invitation to the VEX US Open in Council Bluff, Iowa, in April. Bulldog Bytes has five more regular-season tournaments to go, with their goal being all six teams gualifying for the state tournament and at least one team making the return trip to the World Championships in Dallas, TX, after their Cinderella story trip to Worlds last year in their first year of competition.

Photo Captions: Bulldog Bytes 1: Team 23024A, Pandas With Jobs, celebrates a qualification round victory. Bulldog Bytes 2: Members of all six Bulldog Bytes teams pose with head judge and Shell Representative Danny Brabham. Bulldog Bytes 3: Bulldog Bytes Team 22023B, Pollywogs, with Bulldog



The Pontchartrain Conservancy partnered with Park Forest Elementary Creative Sciences and Arts Magnet School teachers to launch the Consider Litter study to kick off 2024.

These fourth and fifth grade science teachers will conduct a monthly litter sweep and analysis to create an action plan by the end of the 2024 school year. Park Forest Elementary CSAM is a national Green Ribbon campus in Baton Rouge, LA.





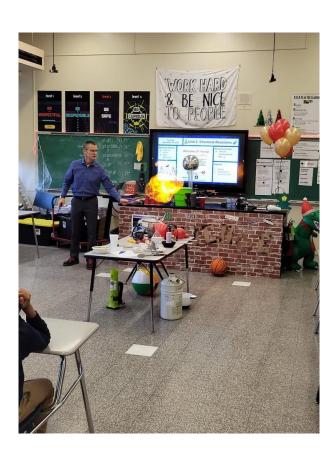


The Nicholls Chemistry Excellence in Teaching Chemistry and Physical Science was awarded to Ms. Sarah Jiminez at Evergreen Junior High School.

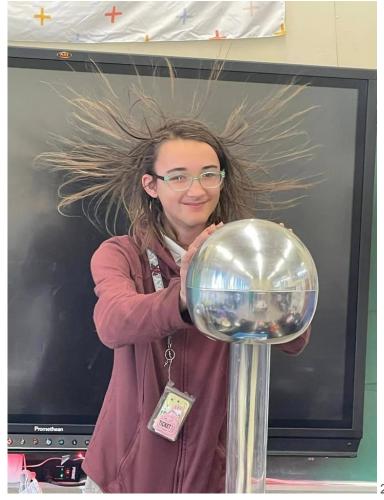
She was recognized for her amazing work and dedication to science education in the region.

The Nicholls Chemistry Roadshow brought a little joy and science to the students at Evergreen Junior High School.

The Nicholls Chemistry Roadshow is grateful to Bayou STEM for providing support of its programming.







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Sixth and seventh grade students from Emily C. Watkins Elementary School recently traveled to Manchac to study wetlands. The trip was made possible via the Louisiana Sea Grant program. Students investigated wetland phenomena by participating in hands on, interactive activities. They discovered the importance of wetlands for Louisiana and the need to conserve them.







Assumption Parish district and school leaders had the opportunity to observe Pierre Part Elementary's instructional leadership team develop a process for annotating lessons to include CER opportunities.



The leadership team and teacher PLC groups at Pierre Part Elementary are deepening their understanding of the powerful CER (claim, evidence, reasoning) strategy in a recent professional development opportunity.

By mastering this strategy, they are taking essentail steps in achieving their mission of increasing student outcomes.







On December 6th and 7th Louisiana Sea Grant hosted two Wetland Day field trips for 6th grade students from eight schools in Terrebonne Parish: Bayou Black Elementary, Coteau Bayou Blue Elementary, Caldwell Middle School, Gibson Elementary, Village East Elementary, Southdown Elementary, Broadmoor Elementary and Oakshire Elementary.



The field trip was hosted in Thibodaux at the Wetlands Acadian Cultural Center, in partnership with the National Park Service. LSTA Treasurer, Nathan Cotten, supported students while they explored the cultural history of their local area, became geologists and studied a sediment core. Students also became physical oceanographers conducting an experiment on how water density contributes to water movement, and they also took a boat ride down Bayou Lafourche to conduct their own water quality tests. The NASEM Gulf Research Program provided funding for this opportunity to over 450 students and 30 teachers!

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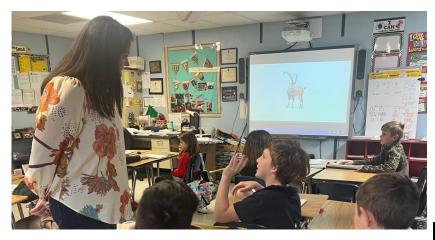




Region 3 LSTA member Alma R Jackson, President elect of the Southern Association of Marine Educators and Program Coordinator for the Gulf of Mexico Alliance, recently attended the Outreach and Education Committee meeting of the Gulf Coast Ocean Observing System held in Orange Beach, Alabama.

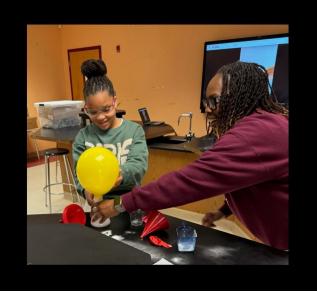
Pictured with Alma is Chris Simoniello a Research Scientist with Texas A&M University and the GCOOS Outreach and Education Manager.





Mrs. Sandy's science class at Bayou L'Ourse Primary School used analytical reasoning to study animal adaptations.

Students began the week of December 11th at John L. Ory Communication Arts Magnet School by completing a chemical reaction experiment



On December 11th, 65 students and 7 teachers from Emily C. Watkins Elementary School in St. John the Baptist Parish engaged in the Louisiana Sea Grant Wetland Day field trip experience at Southeastern University's Turtle Cove Environmental Research Station located on Manchac Pass.

At the research station, students engaged in hands on learning about the importance of the wetlands, sediment deposition and they examined the chemical and biological aspects of the water. Then, students went out on the water to explore the local wetland area. The NASEM Gulf Research Program provided funding for this opportunity.







Mrs. Karrie Dryden's physical science students at Vandebilt Catholic High School compared the molecular structures and properties of graphite and diamond.

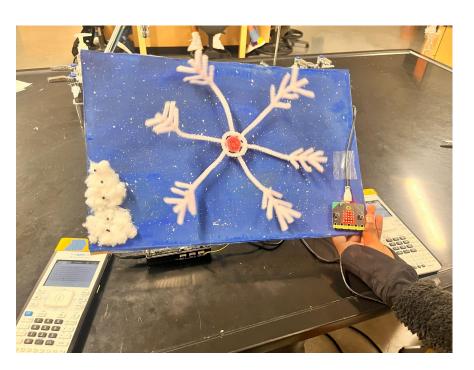
They modeled the structures with marshmallows and toothpicks to visualize the structural differences between the two substances.







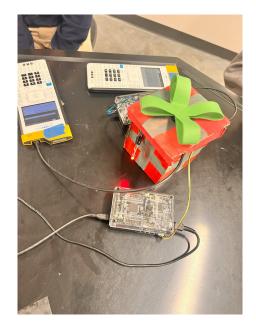
St. Landry Parish Schools had it's district science fair Friday, December 15. It was a great success with nearly 70 students from 9 public and parochial schools presenting their projects to the judges. Good luck to those students moving on to the regional science fair at ULL.



Vice- President of LSTA, Kellie Boquet, of Southside High School was part of a group of teachers sent to Nashville for round two of Open Sci Ed K-5 facilitator training. They represented Louisiana and were trained to help teachers pilot Open Sci Ed for elementary teachers throughout the state.



Southside High School Robotics students in Stacy Thibodeaux's class created many holiday projects using TI Nspire CX II handhelds, TI Innovator Hubs, and microbits.

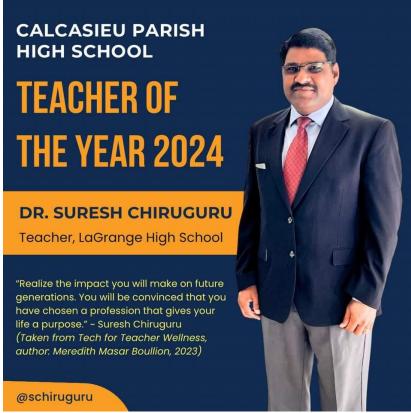


# Regional News MIMMIM Region 5 MIMMIM

Congratulations to our own, Dr. Suresh Chiruguru for being selected as the CPSB High School Teacher of the year!! Dr. Suresh Chiruguru is currently working as the Science Peer Coach and teacher.

He has been a Global Educator, Instructional Coach, Mentor, EdTech Presenter, Lead Professor of Education, and a Leader in Educator Advocacy. Dr. Chiruguru has been a life-long learner and earned multiple advanced degrees in various disciplines including a Doctor of Philosophy (Ph.D.), and Master of Divinity in Christian Education.





Mrs. Louann McKeivier, is supporting 7th and 8th graders in the LDOE Robotics Lab Pilot program at Iowa High School. The program is an innovative effort blending mathematics and technology to provide exposure to beginning concepts in robotics and computational thinking through hands-on learning.



### Regional News MIMINIA Region 5 MIMINIA

After studying water in our world, the St Margaret Catholic School entered the poster contest "One Water" Gulf Coast Soil & Water Conservation District / Lake Charles Natural Resource Conservation. The ranking is as follows: Category 4-6 1st Place – Adele Sov 2nd Place – Diamond Sanchez 3rd Place – Ryleigh Toups Category 7-9 1st Place – Anna Alcock 2nd Place – Ava Moton 3rd Place – Audrey Viney











Buckeye High School STEM students competed in the SeaPerch Robotics Competition at Peabody High School in December.

The STEMinists and STEMgineers walked away with two 1st place, two 3rd place, and two 4th place titles. These students will be competing at the state competition at LSU in the spring.



Lacey Hooiser's STEM Class at Buckeye High School is a state finalist for the Samsung Solve for Tomorrow Competition. Her class developed an idea to create/improve a system for early identification of concussions in high school football players through helmet modifications and an app for coaches.



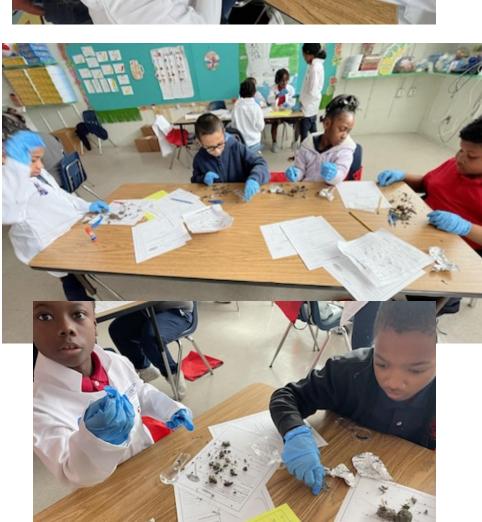
Lacey Hoosier is a science teacher at Buckeye High School and became a finalist for the Varkey Foundation's Global Teacher Prize.

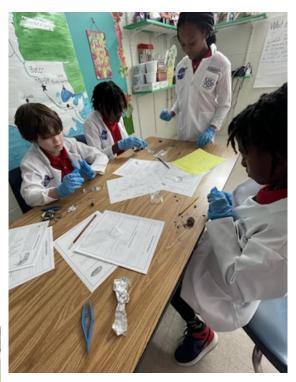
Out of 7,000 worldwide nominations, Hoosier is one of just four teachers from the U.S. and 50 educators worldwide to be selected as a finalist. Earlier this month, Hoosier spent seven days in Paris, France for the international global prize, surrounded by some of the best educators in the world.

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The students in Ms. MacDonald's class at Turner Elementary/ Middle School dissect owl pellets to learn about food chains and food webs.



On December 18, Caddo teachers, along with a student from Southwood High School, successfully completed a certification in lightning design through the "Light It Up" program with the Shreveport Regional Arts Council. The culmination of their efforts was the presentation of their final project on the Bakowski Bridge! The teachers will give their students the opportunity to delve into design during the next semester. The prospect of students showcasing their projects on the bridge in the spring adds an exciting dimension to the program.







For interest in the team, click here to sign up. For more information, please visit the FIRST website or email Dr. Heather Kleiner at grants@sciport.org



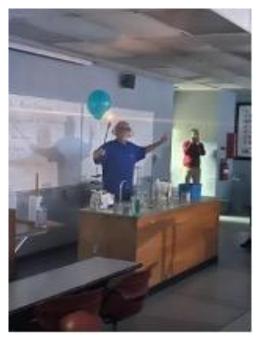


Missy Wooley, SCILS Region 8 LaSTEM Center at Louisiana Tech University helmed a STEM Day for students from Elm Grove Middle School in Bossier City for a special STEM Day on the Louisiana Tech University campus.

Throughout the day the group had the opportunity to visit Dr. Jamie Newman and her anatomage lab, Megan Barr with the VISTA program, examine insects with stereo microscopes in a biology lab, and experience an exciting chemistry demonstration show with Dr. Bill Deese. It was a great day focused on STEM opportunities, connections and careers.











Congratulations to all the phenomenal teachers throughout Region 8 that were awarded 2023 Quality Science and Mathematics (QSM) grants. SCILS partner Alyssa Riordan of Neville Junior High school was awarded a \$2000 QSM grant as well as a \$400 Junior League grant. The funds from the two grants allowed her to purchase six (6) additional Lego Education Spike Prime robot sets. This means smaller group sizes and more hands-on learning with this exciting technology.



Cathi Cox-Boniol (SCILS Region 8 LaSTEM Center at Louisiana Tech University) was on hand to support the Louisiana Tech University Women in Aviation Chili Cook-Off & Aircraft Open House. Hosted at the Ruston Regional Airport, the event provided an opportunity for the aviation students to showcase different airplanes used in their training, allow attendees to be introduced to the instrumentation used in flying, and interact with a larger audience through the chili cook-off.

Proceeds from the chili cook-off will help send representatives from Tech's Women in Aviation to the WIA International Conference to be held March 21-23, 2024, at the Orlando World Center Resort & Convention Center in Orlando, Florida.







Dr. Lindsey Keith Vincent (Louisiana Tech University) spoke to the LS LAMP Scholars, providing an overview of the SCILS Region 8 LaSTEM Center and its various outreach initiatives. She also attended the statewide LaSTEM Council meeting held in Houma and hosted by the Region 3 Bayou STEM center. Missy Wooley (SCILS Region 8 LaSTEM Center at Louisiana Tech University) attended Elementary OpenSciEd facilitator training in Nashville, TN, in preparation for the SCILS team to lead round two of the training for Louisiana teachers early in 2024.

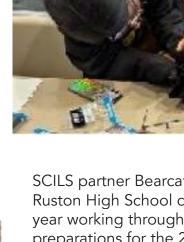






The SCILS team congratulates partner Caldwell Parish Junior High School for bringing home the Champion's Award at the 2023 Sci-Port FIRST LEGO League (FLL) Qualifying Tournament held in Shreveport. The award celebrates a team that embodies the FLL Challenge experience by fully embracing the Core Values while achieving excellence and innovation in Robot Performance, Robot Design, and the Innovation Project.









SCILS partner Bearcat Robotics at Ruston High School closed out the year working through final preparations for the 2024 competition season. The 26-member team has been busy building Swerve drive modules which will serve as this year's robot's driving base. The team's kickoff event is January 6 where the students will find out this year's game, get the rules, and then can begin building.