

## October 19, 2024

### WELCOME MESSAGE FROM THE DEPARTMENT HEAD

Once a Lion, always a Lion

Dear Alumni, Retiree and Current Lions:

Welcome to the 2024 Mathematics Homecoming Breakfast. 🕲 It is always our great pleasure to see you in Commerce. Welcome home. Taking this opportunity, I would like to provide you with this Mathematics Update that summarizes or highlights what happened in the Department of Mathematics since the last Homecoming. I want to thank you and my colleagues for joining this event. Let us celebrate and enjoy this exciting moment.

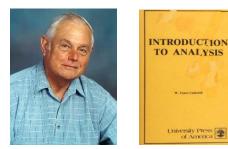
Respectfully, Tingxiu Wang

### A. NEW LIONS IN THE MATH DEPARTMENT



Jauniece Jamison joined in September 2024 as a student worker. She is a junior majoring in social work.

#### **B. IN MEMORY**



Dr. Vance Underhill passed away in May 12, 2024. Retired in 2004, Professor Underhill had taught at Texas A&M University-Commerce for 35 years. He authored the book, Introduction to Real Analysis, which is displayed in the Department of Mathematics at Texas A&M University-Commerce.

### C. HIGHLIGHTS OF THE DEPARTMENT OF MATHEMATICS in 2023-2024

In 2023-2024, we graduated five undergraduate students and seven graduate students. Graduating seven graduate students meets the requirement of the Texas Higher Education Coordinating Board (THECB). We expect to graduate ten or more in 2024-2025. However, graduating five undergraduate students does not meet the requirement of THECB. Our faculty work hard to recruit, retain and graduate more students. In terms of enrollment, we have 31 undergraduate and 37 graduate math majors in Fall 2024. This is a slight increase compared with Fall 2023 when we had 27 undergraduate and 35 graduate math majors.

Department of Mathematics

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In 2023, the faculty published 18 peer-reviewed papers published or accepted. When each author is counted once, it is equivalent to 23 publications. They submitted four grant proposals to the National Science Foundation and Spencer Foundation with a total budget of \$5.64 million. In addition, they

implemented the following grants:

 Dr. Pani Seneviratne as PI and Dr. Mehmet Celik as co-PI continue implementing the National Science Foundation project, REU Site: Theoretical and Application-Driven Mathematics, Award #2243991 with a total budget of \$385,387. In the 2024 summer, twelve undergraduate students from different universities in the country attended an eight-week summer research program in Commerce directed by Dr. Seneviratne, Dr. Celik, Dr. Sirakov and Dr. Ghosh. This is the second group of REU students.



- Dr. Pamela Webster as PI continues implementing the developmental education programs, scale enrollments in corequisite models with a total budget of \$100,000 funded by the Texas Higher Education Coordinating Board.
- Dr. Aditi Ghosh continues implementing the American Mathematical Society (AMS) Simons Research Enhancement Grant with a total amount of \$9,000.

### In 2024, the faculty received the following new grants:

- Dr. Zhaoting Wei received an American Mathematical Society (AMS) Simons Research Enhancement Grant with a total amount of \$9,000 for three years to support his research.
- Dr. Nikolay Sirakov received a sub-Award of \$5,000 for the project, Vital Signs in Opioid-Exposed Neonates through the Sponsor, the University of Alabama at Birmingham, funded by the National Institutes of Health (NIH). This is a one-year sub-award.

Mathematics Endowment Scholarships: For 2024-2025, the Department of Mathematics has nine endowment scholarships available. There are a total of 29 eligible applicants. Twenty-five students were awarded with a total of \$48,104. Application for mathematics endowment scholarships for 2025-2026 is open. The deadline is January 15, 2025. We welcome applications from current and perspective undergraduate and graduate students.



Scan Me for Math Endowment Scholarships

Math Student Awards: Each year, four students are selected by the faculty to receive four awards. In 2024, the following students are the awardees:

- L-3 Communications Excellence in General Mathematics: Emily Nix
- Excellence in Mathematics Education: Desteny Loper
- Aslan Outstanding Graduate of Undergraduate Mathematics Students: Johnathan Baxter
- Aslan Outstanding Graduate of Graduate Mathematics Students: MD Ahiduzzaman

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### Third Place at the Math Bowl Competition:

Oue students won third place at the Math Bowl Competition of the 103rd annual Texas section meeting of the Mathematical Association of America, held on March 22, 2024 at Texas State University in San Marcos, Texas. There, two teams of students continued A&M-Commerce's history of success in the Math Bowl competition. In total, 19 teams representing 12 universities and colleges from across the state participated in the competition. The team of Darwin Little, Jonathan Enright and Xavier Grundler



placed third, missing second place by only one point. The second team, including August Doss, Sherman Losey and Star Nouanesengsy, ranked seventh. The teams were sponsored and coached by instructors Adam Bowden and Rebecca Steward.

The Fall 2024 Meeting of the Mathematics Advisory Council (MAC): The Fall 2024 MAC meeting was held on September 20, 2024. The theme is AI. Dr. Graham gave a welcome talk. MAC members provide valuable suggestions and feedback to the department. We greatly apprciate their contributions. We welcome alumin who work in industries and bisuness to join MAC. Ten external members attended this meeting:

- Sarah Schroeder, Chair of MAC, Software Engineering Manager at L3 Harris Technologies Integrated Mission Systems
- Jonathan Whitaker, Secondary Math Consultant at Region 8 Education Service Center
- Sonya Bader at Brighter Horizons Academy
- Lee Powel, Dean of Academic Affairs and Workforce Programs at Collin College, Frisco Campus
- Mohamed Elbashir at Oracle Corp
- Dessie Camp, Instructor at Tyler Junior College
- Nathan Scarcelli, Sr. Associate Software Engineer at L3 Harris Technologies
- Lisa Ellermann, retired from Region 8, adjunct at Northeast Texas Community College
- Mehrdad Panahi at Collin College attended on ZOOM
- Lora Alomari, Research Assistant I, at Baylor College of Medicine on ZOOM

### D. ACTIVITIES ORGANIZED BY THE DEPARTMENT OF MATHEMATICS

• <u>Mathemartist Competition</u>: In Fall 2023, we organized the Second Mathemartist Competition, for which students use the DESMOS graphing calculator to create artworks. Twenty-seven students from high school and community colleges participated. We thank **Cypress Bank** for co-sponsoring this event.



2023 Mathemartist first-place entry by Boles ISD student Kimmie Juhl

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Math Question of the Week: In each semester, a weekly math question is posted outside of Binnion Room 301 and is also available online at the Math Department Website. At the end of each week, all correct solutions will be entered in a weekly drawing with a prize of \$10 in Lion Cash. At the end of the semester, the student that submits the most correct solutions will receive a \$500 scholarship. In Fall 2023, twenty-nine students participated with 69 submissions, of which 59 were

correct. Emily Nix is the winner of the Math Question of the Week Scholarship for Fall 2023. In Spring 2024, twenty-five students participated with 104 submissions, of which74 were correct. Casey Novelo with 12 correct submissions won the Scholarship. Please follow Facebook and Instagram to see winners and announcements. Only undergraduate students and high school students can join. Visit the math social media for winners.

- Alumni Ambassador: Mrs. Rachel Ballew is our 2024 Alumni Ambassador. On March 19, 2024, Mrs. Ballew talked to our students at the 2024 Alumni Ambassador Forum. After received BS degree in 2013 and MS degree in 2015, Rachel joined Southwest Research Institute as an Analyst. In 2017, she joined USAA and currently is a Product Manager Analyst Research Consultant at USAA. She served as chair of the Mathematics Advisory Council of the Department of Mathematics at Texas A&M University-Commerce from 2021-2024.
- Alumni Network: Our alumni are successful. Since last year, we have posted our alumni information online. Although many alumni post their information on Facebook and LinkedIn, we put together to build the Alumni Network. We also contact our graduates for posting their information on the Network. We would like to hear from our alumni about their stories, accomplishments, lives, inquiries and internship information for current students. Please let us know about you so that we can include you in the Alumni Network.
- Social Media: The Department activities and announcements can be found on Facebook and Instagram. Please scan the QR code to follow us on Facebook and Instagram.
- **Annual Picnic:** we organize an annual picnic on the last class day in each May. At the picnic, we announce the winners for the math awards and conduct induction for the Math Chapter of the Pi-MU-Epsilon Honors Society. We held the 2024 Annual Picnic in the Pavilion of Binnion on
- April 26, 2024. Thirty-two people joined this Picnic. We look forward to seeing you at the 2025 Picnic. Mathematics Student Lounge: Located in Binnion Room 325, the student lounge is for students to study, relax and play games. Water, coffee and sometimes snacks are available there. A microwave oven is also available now.

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Question of the Week Mathemartist Competition

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Rachel Ballew Scan Me for BS 20013, MS 2015 Alumni Ambassadors





Scan Me for Math Facebook

Scan Me for Math Instagram





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Student Lounge

Math Club Activities:



Math Club - Game Night, Sept. 26, 2024



Annual Picnic, April 26, 2024



Math Bowl Team Activity, March 22, 2024

### **E. CURRICULUM CHANGES**

We continue efforts to enhance our programs to meet the needs of students. In Fall 2024, the following programs have become effective:

- BS in Math with Emphasis in Data Science
- MS in Math with Emphasis in Data Science
- Fast-track BS-MS program: In this program, students can take six graduate hours in the senior year that can be used for the undergraduate degree. Seniors may be approved to take additional six graduate hours. For some students, they could earn both BS in Math and MS in Math in five years.

In this semester, we made some fine-tuning on course titles, course descriptions, and prerequisites. We created a new course, Math 178, Business Application in Math, for the College of Business, and collaborated with the Department of Curriculum and Instruction to create double major in math and secondary education. Once approved, these changes will become effective in 2025-2026. In addition, the faculty also discussed the possibility of Emphasis in Statistics.

Email us at <u>math@tamuc.edu</u> Visit us at <u>www.tamuc.edu/math</u> Follow us at <u>Instagram</u> and <u>Facebook</u>

SEE US IN COMMERCE, TEXAS

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