

FORT HAYS STATE UNIVERSITY DEPARTMENT OF MATHEMATICS



FORT HAYS STATE
UNIVERSITY

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Reaching My Goals with the FHSU Math Department

by Perla Camacho

Let me start with a quote from Nelson Mandela, "It always seems impossible until it's done." This leads into something very important in my life, which is accomplishing my goals.

I'm the first one in my family to attend college, but how did I get here? Since I was a little girl, I knew I wanted to become a mathematics teacher. In order for me to become a mathematics teacher I needed to attend college. Therefore, my goals were to graduate high school and be the first one in my family to go to college. When I was eight years old, my parents brought my siblings and me to the United States to give us a better life. I always reminded myself of how hard my parents have worked to give us a better life. I was not going to disappoint them no matter how impossible things seemed.

I graduated high school May 2015 and I knew what my next step was to fully accomplish my goal. I became the first one in my family

to attend college. I attended Seward County Community College (SCCC) in the fall of 2015. While I was attending SCCC, I knew I was going to need to transfer to a university, but I did not know which university. I had never thought about coming to FHSU until one day my advisor told me to come take a campus tour. I will never forget the day I came to FHSU for the first time. I met Dr. Bill Weber and he told me about all the opportunities I would receive here at FHSU. I was very impressed, and I knew FHSU was the right university for me. I came to FHSU with the intention of just getting more information, but I left knowing I would transfer here.

I transferred to FHSU in the fall of 2017. Moving to Hays, KS was very difficult for me because I was in a place where I did not know anyone, and I felt like I was not in the right place. My first semester was hard enough that I got to the point of wanting to give up on my goal and go back home. Everything seemed impossible, including becoming a mathematics teacher. However, thanks to my older sister and my advisor, Dr. Bill Weber, I finished the semester and I stayed at FHSU. This is my fourth semester at FHSU, and I'll be student teaching next semester.

The Tiger Family is Important and Always Welcome
Great things continue to happen in our department. We cannot succeed without alumni and friends. Your gifts, information, hiring of graduates and interns, and even simple things like spreading the word about the strengths of our department, our students, and faculty, **are all important.** You are **always welcome** to stop and visit with faculty and students!



Perla also became a U.S Citizen in December. Congratulations Perla on all of your great accomplishments!

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Besides my first semester being hard, this semester, spring of 2019, has also been hard. Once again, I thought it would be impossible to get something done, which was my math seminar plus a mile long list of other assignments. All mathematics majors are required to do a math seminar and let me just say it's not as easy as it seems. One of the hardest parts of doing a math seminar is picking a topic. I had a hard time picking my topic because I wanted a topic that I would be interested in learning more about. Another big, important part of math seminar is self-motivation. Getting my seminar paper done just seemed impossible because I had no motivation. However, thanks to Beverly Unruh and our daily conversations, I felt more confident in getting my seminar done. (Never forget to stop by Rarick Hall Rm 383 on your way to class to say hi to Beverly Unruh, she could become your cheerleader and best friend.)

Bev, Dr. Sarah Broman, Dr. Lanee Young, Dr. Bill Weber, and Dr. Keith Dreiling always believed in me and they would daily remind me that I would soon get it done and over with.

FHSU has offered me many opportunities, including being part of the Noyce Teacher-Leader program, which is a competitive scholarship for students who plan to teach science or mathematics. Noyce has been a wonderful experience that has helped me prepare to become an outstanding mathematics teacher. Also, as a Noyce scholar, I have received opportunities such as traveling to conferences and spending a week in a rural community observing and teaching mathematics.

I could not be more thankful to FHSU faculty, specifically the faculty in the mathematics department, for all the support they have given me through my journey at FHSU. When everything seemed impossible, they believed in me and helped me see that I could get it done because it was possible. Thank you FHSU for the wonderful experiences. Dr. Sarah Broman always tells me "you can do anything you want for a short period of time." Therefore, always keep in mind that ANYTHING is possible, and you can do anything as long as you want it and believe in yourself.

MATH, PHYSICS, AND RESEARCH AT FHSU — Patrick Cook

The end of this semester will mark the end of my third year majoring in mathematics and physics at FHSU. After next year, I plan to pursue a Ph.D. in Physics, though I have not yet decided where. These two majors synergize extremely well with one another: many of the understandings I learn in one major are either applied or strengthened in the other. Moreover, both departments have very similar, excellent environments: open-door policies, peer tutoring, study rooms, scholarships, and research opportunities.

For me, research is the most important aspect of either of these departments. It has shaped the entirety of my experience at FHSU. Though my research has mainly been in the physics department, I have participated in mathematics research, and as you can imagine I use plenty of math in my physics research. Being able to explore new ideas, engage in scientific writing, and work together with students and faculty on challenging problems is something you can't get just by being in a classroom. By far, the experience and knowledge I have gained from research is at least as valuable as what I have gained in the classroom.



Currently, I am working to publish two papers in the field of computational optics in the Journal of Biomedical Optics. Without the research opportunities I have had at FHSU, this would have never would have been possible.

Editors Note: Patrick Cook, Derby, Kansas, will finish his math degree Fall 2019. We are extremely fortunate that Patrick decided on FHSU to complete his undergraduate work.

NICOLE MAURER RECEIVES KANAAE CLASSROOM GRANT

Manhattan, KS — Ms. Nicole Maurer, math instructor at Udall Junior/Senior High School, USD 463, Udall, was recently awarded a \$500 Classroom Grant by the Kansas Association of American Educators (KANAAE), a non-union professional educators' association serving Kansas educators. Ms. Maurer will be using the funds to purchase graphing calculators to be used in her mathematics classes.

"KANAAE is excited to provide these materials for Nicole's classroom," said Garry Sigle, KANAAE executive director. "As a professional association we are committed to helping educators purchase materials through our scholarship and grants program that ultimately benefit students."

The winners of the KANAAE Teacher Scholarships and Classroom Grants are selected by a committee of their peers from across Kansas. All educators are encouraged to apply.

KANAAE provides teacher scholarships and classroom grants exclusively for Kansas educators twice a year. The grants can help pay for a variety of materials for the classroom and scholarships can be used to cover a wide variety of expenses including tuition, books, conferences, and workshops. The next application deadline is March 15, 2019. For more information visit www.kanaae.org.



ALUMNI UPDATE — ROGER SCHUSTER



Roger recently was recognized for his exemplary service in the Rawls College of Business at Texas Tech University,

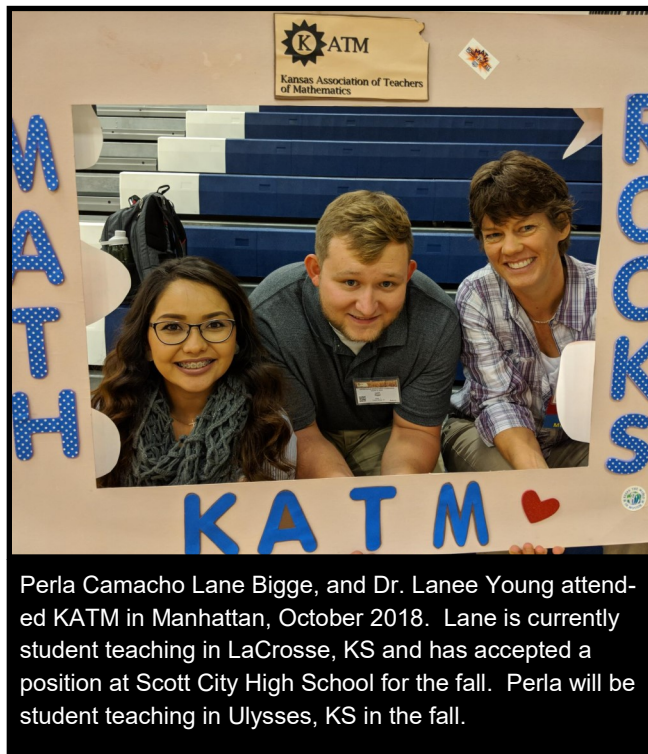
Roger Schuster graduated in 1988 with a Baccalaureate degree in mathematics from Fort Hays State University. He has stayed in touch with the department sending emails and pictures about his successful career in the past 30 years.

The following is what he wrote in his latest email. I would say I would vouch one never knows where a math degree will take him or her. After getting my bachelors in math from FHSU; I taught high school math for 3 years and then was a math TA here at Texas Tech University for 3 years. One of the people who ran a local software development company then told me if I had a masters in math, he would teach me that profession [writing and maintaining programs] I worked for him for 3 years and then he helped me get hired by Texas Tech full-time. I worked for the entire university for the next 15 years or so and then was poached over here to the Rawls College of Business as their personal programmer. I have been here almost 4 years and love it. I never thought in 1988 I would now be working happily for a major business school at a major university; life is full of surprises and a math degree is so beneficial.

PUTNAM COMPETITION

This last December, FHSU participated in the William Lowell Putnam Competition for the second year. The Putnam competition is a 6 hour math competition with 12 questions open to all undergraduate students who have not taken the competition four times. All problems are proof based and in general very difficult such that the median score is usually 0. We had two students this year take the exam: Tyler Bloom and Fernando Guzman. They both managed to score a positive number of points.

Check out our Master of Science in Education with an Emphasis in Mathematics at the following link:
www.fhsu.edu/mac/s/academic-programs



Perla Camacho Lane Bigge, and Dr. Lane Young attended KATM in Manhattan, October 2018. Lane is currently student teaching in LaCrosse, KS and has accepted a position at Scott City High School for the fall. Perla will be student teaching in Ulysses, KS in the fall.

MATH & CS Faculty Assist with Science Olympiad

Science Olympiad is a national, non-profit organization dedicated to improving the quality of K-12 science education through participation in Science Olympiad Tournaments and incorporation of the Science Olympiad into classroom curriculum.

Science Olympiad competitions are like track meets, consisting of 23 individual and team events. Each year, events are updated to reflect the ever-changing nature of biology, earth science, chemistry, physics, computers, astronomy, engineering, and technology. By combining events from all disciplines, Science Olympiad encourages a wide cross-section of students to participate.

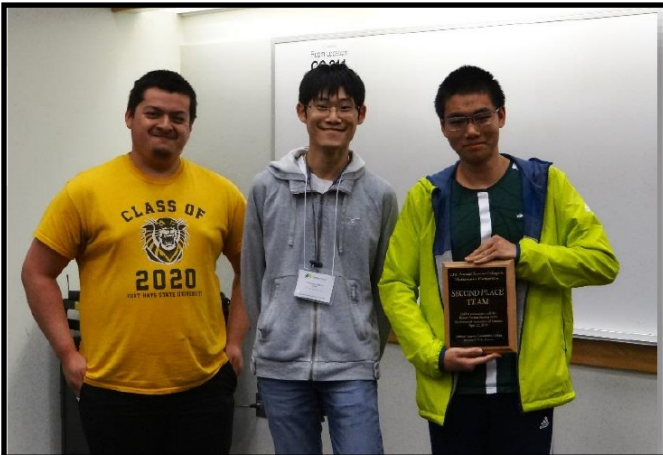
Students who participate in Science Olympiad are taught advanced science through active, hands-on participation. All events involve team work, group planning, and cooperation. There are now over 5,500 middle schools and high schools from all 50 states who participate in Science Olympiad.

The Departments of Mathematics and Computer Science at Fort Hays State University have been actively involved in coordinating, organizing, and judging events for the past several years. Faculty members who assisted with the 2019 FHSU Regional Competition on February 13 and 15 were: Tom Dunn – Mission Possible, Lanee Young – Fermi Questions, Soumya Bhoumik and Sarbari Mitra – Write It Do It, Bader Abukhodair – Codebusters, and Hongbiao Zeng – Game On.

Mini-Math Festival at Science Olympiad

Have you heard of [Julia Robinson Math Festival](#)? For the past two years, FHSU Mathematics faculty and students have created their own mini-festival at Science Olympiad. Between Science Olympiad Events, high school and middle school students can come play games, solve puzzles, try mathematical card tricks, and solve math problems with FHSU math students and faculty. This has been a big hit with Science Olympiad sponsors and students. Hopefully next year, I will remember to take some pictures so you can see the excitement.

STUDENTS PLACE AT MATH COMPETITION



Fernando Guzman, Mike Xiao, and Xinye Bao earned 2nd place at the 2018 Kansas Collegiate Problem Solving Competition.



Patrick Cook, Tyler Bloom, and Hoyoon Woo earned 6th place at the 2018 Kansas Collegiate Problem Solving Competition.

Each year students compete in the Kansas Collegiate Mathematics Competition which is held in conjunction with the Kansas Section Meeting of the Mathematical Association of America. Johnson County Community College hosted the 2018 meeting on April 20-21. Six students, six faculty, and one Ilora attended the meeting. Drs. Dunn, Riazi, Mitra, and Bhoumik presented at the conference.



Back Row: Bill Weber, Tom Dunn, Tyler Bloom, Hoyoon Woo, Fernando Guzman,
Middle Row: Mike Xiao, Xinye Bao, Soumya Bhoumik
Front Row: Lanee Young, Patrick Cook, Mohammad Riazi, Ilora Bhoumik, Sarbari Mitra

RETIRED FACULTY NEWS

It appears the retired faculty are quite busy this year. Thank you to those who reported activities as we love to hear from you.

Mary Kay Schippers

My biggest news from 2018 is the arrival of our sixth grandchild, our second grandson, named-Are you ready for this?-Daniel. Daniel was born to Jared and Marli last May in Rapid City. Danny, my husband, is finally able to fit his head through a doorway again.

My second biggest news is the publishing of my third book making my farm series a trilogy. It's called The Return to the Family Farm.

My third biggest news was a trip to Seattle with my sisters and their husbands. We had never been there before, and it was lovely.

Beyond that, my days of retirement are very similar to previous years. They are filled with animals, gardening, farm maintenance, volunteer work, traveling to Rapid City and Phoenix to see family, and lots of houseguests.

So far, "sitting on my laurels" has not made the list of things to do. Some day...

Ellen Veed

Dr. Veed reported that she spent time at her cabin in Colorado and continues to enjoy painting.

Rosalie Nichols

We had another year of traveling. The big trip was to Scotland last summer. Every four years the Scottish Clan McLeod has a parliament on the Isle of Skye at Dunvegan. We spent four days in Edinberg, visiting museums, then went to Skye.

Other travels for the Scottish Clan were to Omaha, Indianapolis, Georgia, and twice to Virginia.

A grandson graduated from KU law school in May. He married in October. These were two more trips to Kansas.

Weeden's term as US President of Clan McLeod is up this spring.

Carolyn Ehr lives very close by. We see her every day we are not traveling.

We continue to enjoy living in New Mexico...the mountains are beautiful, weather is lovely.

SUMMER MATH CLASSES

On-line

MATH 010 — Intermediate Algebra
MATH 110 — College Algebra
MATH 122 — Plane Trigonometry
MATH 130 — Precalculus
MATH 250 — Elements of Statistics
MATH 331— Calculus Methods

On-Campus

MATH 885 — Concepts of Probability
and Statistics
MATH 886— Enrichment Topics
(Graph Theory)

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Dr. Elton Beougher 1940 - 2019



Dr. Elton Beougher passed away on Wednesday, February 20, 2019 at HaysMed. Elton was a faculty member of the Department of Mathematics from 1968 – 2000 and served as chair of the department from 1973 - 1982.

Elton was born on March 22, 1940 in Gove, KS to Merlyn E. and Vivian V. (Smith) Beougher. He married Cecile LaSalle on August 1960 who preceded him in death on January 9, 1994. He later married Wendy Morton on September 30, 1994.

Elton graduated from Gove Rural High School in 1957 and Fort Hays State University in 1961 (BS) and 1964 (MS) in Mathematics. He taught junior and senior high school in Winona, KS from 1961 to 1964 and senior high school in Garden City, KS from 1964 to 1965. He then completed his PhD from the University of Michigan in 1968. He had also attended Kansas State University and Winona State University in Michigan. He then began his career at FHSU. Elton served professionally as President and Treasurer of the Kansas Association of Teachers of Mathematics and Chairman of the Kansas Section and Kansas Governor of the Mathematical Association of America.

Elton became a member of the Methodist Church in 1952 and accepted Christ as his personal savior in 1972. He played in the Handbell Choir and sang in the Chancel Choir, and he served as a teacher and youth leader on many committees and drove the bus for the Kid's Club. Elton was an early member of the group Crossroads.

Elton was a past president of the Smoky Hill Trail Association and served on the board of historic Fort Hays for many years. He enjoyed history, metal detecting, fishing, hunting, and traveling.

Elton is survived by his wife Wendy, daughter Tracea Collins and husband Alan and grandchildren Alexis and Robyn; son Timothy and wife Ronda and grandchildren Shelbie (Jason), Courtney (Adrian), Lacie, Josie, Luke, and Levi; also Chandler Morton and grandchildren Aidan and Mason and Jeremy Morton and wife Carmon and grandchildren Coby, Cole, and Will; brother Marvin and wife Marilea, two great-grandchildren Brooks and Graves, and many special nieces and nephews.

He was preceded in death by his parents, a brother Loren and sister-in-law JoAnn, a sister Ima Lee Heier, and his wife Cecile.

Editor's Note: Thank you Dr. Beougher for being an example for each of us to aspire to reach.

Computer Programming Summer Camp of KAMS

Dr. Hong Biao Zeng will host Gamers Unite!, a computer programming summer camp sponsored by Kansas Academy of Math and Science, between June 24 and June 27. This is the fifth consecutive year that Dr. Zeng has hosted such a summer camp. During this year's camp, up to 30 high school freshmen and sophomore students of Kansas will learn how to use Unity Game Engine to write 3D computer games. In the past four years, campers learned Java, Alice, Scratch, and Unity Game Engine. <https://www.fhsu.edu/kams/summer-camps/index> Please notice that on the website, the camp time starts June 23 as students must check into the dorm before camps starts on June 23.



Jayne (Hansen) Goetz ('16) and her husband Adam gave birth to a future math major Sloane Elizabeth on July 17, 2018. Rumor has it Sloane likes to talk a lot but no one can imagine where she gets it.

2018 Faculty Scholarly Activities

Faculty from the Department of Mathematics and the Department of Computer Science are actively involved in scholarly research. Faculty worked with 20 KAMS students and one undergraduate student on research projects, conducted weekly problem solving session with students, served as seminar advisors for seven students, and presented weekly seminars. The following is a list of scholarly activities by mathematics and computer science faculty in 2018.

Weekly seminar titles included **Inverse Functions: We Are**

Teaching It All Wrong!; Why $\pi^2/6$; Fibonacci Graceful Labeling in Graphs; Ubiquitous, Unique Factorization; Geometry, Algebra, and Multiplicities; Rational, Irrational, Algebraic, and Transcendental Numbers; Multiplicity of Monomial Ideas; Math Exchange Credit Report; Apportionment Use in U.S. House of Representatives; Mathemagical Card Tricks; Field Extensions, Quaternions, and Key Primes; Power Domination on Graphs; Mathematics Stack Exchange; I Like That OI' Time Mathematics; A Math Game; and Pascal's Theorem. One faculty member presented **Introduction to the MSE** at the Kansas Association of Teachers of Mathematics Annual Conference in Topeka, and another faculty member presented **The Desmos Classroom Interface** at the KC Tech Expo and at the 2018 Area Math & Science Teacher Workshop in Liberal. Another faculty member presented **Masters of Science in Education with an Emphasis in Mathematics** at the Liberal Conference. **L(h,1)-Labeling of Circulant Graphs** was presented at the International Conference on Discrete Mathematics and its Applications to

Network Science in India and at the 10th International Workshop On Graph Labeling in Indiana. **Power Domination in Graphs** was presented at the Kansas Section of the Mathematical Association of America Conference. Faculty works that were accepted for publication included **L(2,1)-Labeling of Circulant Graphs** and **On k-Graceful Labeling of Pendant Edge Extension of Complete Bipartite Graph** in *Discussiones Mathematicae Graph Theory, and Algebra and Discrete Mathematics*; **Graceful Labeling of Triangular Extension of Complete Bipartite Graph** in *Electronic Journal of Graph Theory and Applications*; and **Mobile Computing: Operating System and Programming** in *IJournal's International Journal of Software & Hardware Research in Engineering*. A faculty member earned 41,500 reputation points with 2800 answers and 20 proposed questions in the Mathematics Stack Exchange.



Dr. Keith Dreiling, Dr. Hongbiao Zeng, and Katie Abukhodair participated in Halloween activities on 3rd Floor Rarick.



Good luck trying to find the real Waldo!!!

Online versions of MATH 234 Analytic Geometry and Calculus I, MATH 130 Precalculus Mathematics, and MATH 101 Liberal Arts Mathematics were developed. MATH 870 Teaching Techniques and MATH 883 Concepts of Calculus were created for students in the MSE Mathematics Program. CSCI 431 Computer Graphics was added as an on-campus and online class to the Computer Science Program as part of a major revision project to the program that included changes in course names, descriptions, numbers, and prerequisites. Revisions to course numbers, descriptions, and prerequisites were also made to the Mathematics Program. In addition, work continues to be done for the NSF Noyce Grant for the Noyce Scholarship Program.

Obviously — We still have enough time to have a necessary; but not sufficient, amount of fun.

Thank You for Your Support

Department of Mathematics enjoys this opportunity each year to list the donors who have given so generously to our department. Without your contributions it would not be possible for us to award scholarships to our deserving majors. Please check out the list of students receiving scholarships. We wish to thank each of you who have shared your financial resources with the university, and especially wish to thank those of you who have designated the Mathematics Department as recipient. We also appreciate the employers who matched your contributions.

Tom and Tina Albers, Lavern and Cari Andrews, Patrick and Keri Applequist, Gary and Bernice Bell, Elton and Wendy Beougher, Charles and Charlotte Bigler, Duane Blaesi, The Boeing Company, Benjamin Bogue, Jerry and Edith Bollig, Susan Bozeman, Darren Brungardt, Ryan and Jessica Buchanan, Ron and Bernice Capps, Neil and Sharon Carlson, Kent and Lisa Colwell, Thomas and Emily Decker, Mary Dinkel, Scott Claassen and Francine Dreiling, Keith and Pam Dreiling, Anderson and Camia Dugazon, Kay and Mildred Dundas, Thomas Edgett, Ken Eichman, William and Debra Fox, Jerold and Paula Harris, Terry and Carol Herdman, Al and Marilyn Herren, Jerrod and Jess Hofaker, Rodney and Karen Hunley, Roger and Teresa James, John and Regina Johnson, Brad Kearns, Cheryl Kessler, Vernon and Virginia Kisner, Richard and Sandra Kratzer, Mike and Carmen LaBarge, Darrell and Sheila Latham, Roger and Darlene Lauer, Bob and Kim Lee, Larry and Donna Leitner, Aaron Lessor, Max and Thelma Liggett, Thomas Lonnon, Paul and Pat Luea, Jim and Shirley Malcolm, Reza Marefat, Larry and Connie Masters, Mason May, Maria and Perry Mick, Jean Milham, Merrill Milham, Ronald and Debbie Miller, Regina Miller, Wayne and Alberta Neel, Sylvia Nelson, Weeden and Rosalie Nichols, Geoffrey Peter, William Peterson, Donald and Kathy Petr, James and Sharla Pfeifer, Larry and Darlene Plymell, Mohammad and Seddigheh Riazzi-Kermani, Richard and Sharon Ruder, Robert and Christine Sauber, Gail Stanley, Jim and Debbie Stelter, David and Betty Taylor, Textron, Inc, Blake and Crystal Vacura, Ellen Veed, Charles and Reta Votaw, Bill and Tiffany Weber, Rex and Margaret Wilson, Marilyn Wilson, Leroy and Sharon Winklepleck, Lori Wittrock, Wilbur and Shirley Wood, Lane Young, Hong Biao and Michelle Zeng

NEAL SCHMEIDLER ('70) RECEIVES 2018 ALUMNI ACHIEVEMENT AWARD

Neal F. Schmeidler is a manager in the public sector practice of Grant Thornton LLP, Alexandria, Va., the U.S. member firm of Grant Thornton International Ltd., one of the world's leading organizations of independent audit, tax and advisory firms. His technical expertise includes human capital planning, productivity and work measurement, management and operational analysis, work breakdown structure development and statistical analysis.

He has provided services as an internal and external consultant to private industry and defense and civilian agencies of the U.S. federal government for the past 45 years. He is a Fellow of the Washington Academy of Sciences and the Institute of Industrial and Systems Engineers.

Schmeidler received a Bachelor of Science degree in mathematics from Fort Hays State in 1970 and a Master of Science degree in industrial engineering from Kansas State in 1973. He and his wife, Lorrinda, live in Springfield, Va.

Neal visited with MATH and COMPUTER SCIENCE students and faculty on September 28. The presentation was very informative as he started working at the K-State Extension office in Manhattan, has worked for TWA, NASA, numerous government departments as well as private firms. If any student is interested in seeing the adventures one can have with a math degree, Grant Thornton and Neal Schmeidler would be a great place to start.



MACS CLUB UPDATE:

We still love ice cream, pizza, and PI(E)!



SCHOLARSHIP FOCUS: The E.E and Louie Colyer Memorial Scholarship

The FHSU Math Department has been blessed with many loyal donors. It is our goal to recognize strong history of the Mathematics Department by allowing you to meet some of our past department members. Through the generous gifts of these individuals and their families, the legacy of FHSU Mathematics continues to help students achieve their goals.

For a period of 28 years, the name of E.E. Colyer was synonymous with the mathematics department at Fort Hays State. Professor Colyer served from 1915 to 1943 as a mathematics teacher. Before coming to FHSU, he served as a superintendent of schools at Oakley and Almena and principal at St. Francis and Dighton.

E.E. Colyer was born Feb 10, 1868 at Carthage, MO. In 1915 he received a bachelors degree from Cooper College (Sterling College) in Sterling, Kansas. He was awarded a Master's degree from the University of Kansas in 1916. He also did post graduate work at the University of Oregon, the University of Nebraska, and the University of Colorado.



E. E. Colyer



Louie Colyer

Professor Colyer died at Plainville, Kansas, August 29, 1965 at the age of 97.

Mrs. Louie Colyer was born in Lynn, Norfolkshire, England April 2, 1870. She came to America in 1881. She died June 14, 1952 in Hays, Kansas at the age of 82.

The Colyers were married at Gaylord, Kansas August 25, 1897. Both Mr. and Mrs. Colyer were teachers. Their hobby was gardening. Mr. Colyer made provision in his will for \$4000 from his estate to be given to Fort Hays Kansas State College for the E.E. and Louie Colyer Scholarship Memorial. For over 50 years, students continue to benefit from his generosity, foresight, and leadership.

Thank you Professor & Mrs. Colyer.

MATH RELAYS 2018

by Bill Weber

Despite the cold and snow, the FHSU Math Department hosted the **40th Annual Math Relays** on November 8, 2018. Although some schools were unable to attend due to the weather, we were still able to host nearly 600 students from 45 schools, Dr Beougher came to visit, and the day was a success!

In class 1A, the team champions were once again St. John's Catholic, followed by Tipton Catholic in 2nd, and Macksville 3rd. In the 2A/3A category, Republic County won top honors, with Minneapolis and TMP-Marian placing 2nd and 3rd. Within the 4A-6A category, Hays High brought home top honors, with Salina Central 2nd, and Great Bend 3rd. For a complete listing of team placing and individual winners, please check our website <http://www.fhsu.edu/macs/Math-Relays/Past-Winners/>

In addition to the competition, we also had FHSU math faculty available to visit with students about what it means to be a math major at FHSU, as well as games to play and puzzles to solve for students during their non-testing times. We visited with a large number of students; hopefully this will entice some of them to consider a degree in math from FHSU! Our alumni can be a great source of recruiting also, so if you know of a student in your local community who might be a good math major, please have them contact me at bweber@fhsu.edu so we can discuss the possibilities which exist.

The 41st Math Relays will be held on Thursday, November 14, 2019. We look forward to another fun day of hosting the best and brightest math students from our area on the FHSU campus!



Lauren Zerr, Diana Sabados, Ivy Lee, Kenton Lindsey, and Lane Bigge enjoy a good laugh before the Scholarship Reception. The students were preparing for Mr. Sadler's jokes.

FACULTY MEMBERS RECEIVE AWARDS

Each fall and spring semester, the five colleges nominate faculty members for university awards in Teaching, Scholarly Activity, and Service. One person is chosen from each of these areas as the recipient at the university level. The University President and other administrators interrupt class to surprise the deserving recipients. In the spring, Dr. Mohammad Riazi was awarded the Outstanding Research Award, and in the fall, Dr. Bill Weber was the Werth College of Science, Technology, and Mathematics nominee in the area of Service. **Congratulations to both of you!**



Dr. Mohammad Riazi received the Spring 2018 Outstanding Scholarly Activity Award.



Dr. Bill Weber receives the Fall 2018 Outstanding Service Award.

New Adjunct Faculty in Math and Computer Science

Several more adjunct faculty were hired to handle the growth of the online Computer Science Program, the departure of a Computer Science faculty member, the start of a new cohort of students in the Computer Science Program at Sias University in China and the creation of new mathematics courses.

Shukri Abotteen taught two sections of CSCI 461 Programming Languages and two sections of INF 654 Introduction to Web-Enabled Database: MySQL to students in Sias University in China. Due to visa issues, he was not able to travel to China, so he sent videos and PowerPoint presentations to Sri Nalla in China who presented the information to the students, answered questions, and relayed information back to Shukri. Shukri will finally go to China this spring to teach on their campus. Shukri lived in Pompano Beach, FL prior to leaving for China. Shukri earned his BS in Computer Engineering at Jordan University in Jordan and his MS in Computer Science from Maharishi University of Management in Fairfield, IA.

Sri Nalla aided Shukri as a cooperating teacher in China. Sri is from India and normally teaches Global Business English courses at Sias, but with her Bachelor's degree in Computer Science from Osmania University, she was able to help us offer our courses last semester. She is helping us again this spring in the same way since we were not able to send a second person to teach in China.

Leticia Rabor will teach students at Sias from Escondido, CA with Sri's help. Leticia has a BS in Computer Science from California State University and an MS in Information Assurance from the University of Advancing Technology in Tempe, AZ.

Gene Bryant is currently teaching online sections of CSCI 121 Computer Science I and CSCI Computer Science II this semester. He is from Austin, TX and earned his MS in Management Information Systems from Texas A&M University.

Mark Horbovetz is also from Austin and is currently teaching an online section of CSCI 221 Computer Science II. Mark has a BA in Computer Science and an MBA from the University of Austin and has taken Computer Science coursework at Colorado State University. In addition to teaching computer science classes, he also has industry experience as a programmer/analyst and senior programmer.

Heng Wu is teaching an online section of CSCI 251 Data Structures. Heng lives in Stillwater, OK and has a PhD from Texas Tech University with areas of study in parallel computing, high performance computing optimization, large scale computing, and data intensive computing.

Anas Hourani lives in Vestal, NY and is teaching an online section of CSCI 321 Assembly Language and an online section of CSCI 431 Computer Graphics. Anas has an MS in Computer Science from Amman Arab University in Jordan and a PhD in Systems Science from State University of New York.

Aimee Overmiller is teaching an online section of MATH 010 Intermediate Algebra. Aimee graduated from FHSU with a BS in Mathematics and an MS in Instructional Technology. She is currently working on her MSE with Emphasis in Mathematics at FHSU. Aimee lives in Beloit, KS.

Andi Dale is teaching an online section of MATH 250 Elements of Statistics. Andi earned her MS of Liberal Studies with an Emphasis in Mathematics from FHSU and currently lives in Protection, KS.

Tatiana Rivadeneyra lives in Washington, DC. She has a Master of Education Instructional Technology from Northern Arizona University and a Doctorate in Instructional Leadership with Emphasis in Curriculum and Instruction from Argosy University in Phoenix. She is teaching an online section of MATH 180 Concepts of Elementary Mathematics.



NOYCE Graduates returned to campus this semester to share their experience with current students.

FHSU Math Education Majors Continue to Receive Benefits through NSF Noyce Program

Both pre-service and in-service math education majors at FHSU continued to see the benefits of the NSF Robert Noyce Scholarship Program during the 2018-2019 academic year. Lane Bigge (Norton senior), Perla Camacho Liberal senior via Seward CCC), Alexis Meinart (Garden City junior via Garden City CC, Diana Sabados (Brighton, CO junior), and Lauren Zerr (Russell Springs junior) received scholarships for nearly \$13,000 each as they complete their degrees at FHSU either this spring or next year. Additional benefits (besides the scholarship itself) included paid travel to math/science conferences, coursework which directly prepares students to teach in rural school environments, and specialized mentoring both while at FHSU and after graduation, so that each graduate of the program is optimally prepared to enter teaching as well as continue in it for years to come.

In addition, a Noyce sub-grant was also received thanks to the work of Dr. Janet Stramel which allowed former Noyce math awardees Thomas Broxterman (currently teaching at Hoyt-Royal Valley), Elaina Garrett (currently teaching in Pratt), Brianna Kear (currently teaching at Wellsville), Elle Stein (currently teaching in Ellis), and Lakin Werth (currently teaching in Oakley) to return to FHSU for a Projects Based Learning workshop in March. Although it was rather cold, they were able to launch a high-altitude balloon and collect data from it, as well as attend the Dodge City weather station to see how mathematics can be applied to projects such as these. In addition, there are funds for them to bring their students to a balloon launch, hopefully piquing student's interest in math and science.



Thomas Broxterman ('17) Elle Stein ('17), Brianna (Wooldridge) Kear ('17), Elaina Harberer ('17) and Lakin Werth ('17) at the National Weather Service in Dodge City, KS after their balloon launch.

We are currently wrapping up year 1 of a 5 year Noyce cycle, so if you know of any students who you think might make great math or science teachers, please give them my contact information at bweber@fhsu.edu ; I'd love to visit with them about the program! We have 4 years remaining in which to award scholarships, and in order to be eligible for the grant, students must be at least of junior status,

meaning they must have completed at least 60 credit hours of coursework. Other requirements include a minimum GPA, active participation within the local STEM education group, and a commitment to teach math/science for 2 years after graduation. Specifics can be found at <https://www.fhsu.edu/smei/noyce/>

2018-2019 Scholarship Awards of over \$100,000 in the Mathematics Department

Jeff Sadler

Financial support from multiple sources provided more than \$100,000 in scholarship dollars for FHSU Mathematics Department students during the current academic year. The funding sources included gifts of alums and friends of the department, the National Science Foundation Noyce grants, and Fort Hays State University's Academic Opportunity Awards. Students of the Mathematics Department continue to be blessed by the scholarship dollars available, reducing the personal cost of their higher education.

The Academic Opportunity Award (AOA) Scholarship in Mathematics recognizes incoming freshmen to FHSU. Now in its eleventh year, this category of scholarship provides a two-tier structure with award amounts of either \$900 or \$500. The award and amount is based upon a student's interest in pursuing a degree within mathematics as well as upon the student's high school academic achievement and ACT/SAT scores. This past year, seven AOA scholarships worth \$5,500 were offered to students interested in beginning a degree program in mathematics. From this group of prospective students, three accepted the awards for a total of \$2,300 in scholarships. Those students included:

Lailah Collins (Wichita)

Braxton Roth (Decatur, TX)

Hunter Hays (McCook, NE)

Twenty-four students working on a major or a minor in mathematics received over \$30,450 through both prestigious named-scholarships and departmental scholarships. These scholarships are funded through both endowed funds and other designated contributions, some pledged during the annual Tiger Call Telethon. A few family scholarships (such as the second-year Milham-Wasinger Annual Family Scholarships, the tenth-year Moore Family Scholarships, and others) were supported through designated donations and fund endowments over the past year. The following FHSU students received both high recognition and significant scholarship dollars through named-scholarships:

Diana Sabados (Brighton, CO)—Moore Family \$1,000 Scholarship

Judson Tillotson (Valley Center)—Moore Family \$1,000 Scholarship

Lane Bigge (Norton)—Moore Family \$1,000 Scholarship

Patrick Cook (Derby)—Milham-Wasinger Annual Family \$2,500 Scholarship

Fernando Guzman (Hays)—Milham-Wasinger Annual Family \$2,500 Scholarship

Collin Johnson (Salina)—Etter \$800 Scholarship

Melissa Olguin (Hays)—Baxter \$700 Scholarship

Patrick Cook (Derby)—Marshall \$1,500 Scholarship

Lailah Collins (Wichita)—Ogle \$750 Scholarship

Sadie Miller (Hiawatha)—Denio \$1,200 Scholarship

Michael Cyr (Clyde)—Tebo Family \$1,000 Scholarship

Mackinzie Foster (Topeka)—C.W. Lowry \$800 Scholarship

Lauren Zerr (Russell Springs)—Dr. Ellen Veed \$1,000 Scholarship

Alexis Meinert (Garden City)—Dr. Caroline Ehr \$500 Scholarship

Patrick Cook (Derby)—P. Miller Math/Physics \$1,000 Scholarship

Fernando Guzman (Hays)—Schippers Family \$1,000 Scholarship

Tyler Bloom (Netawaka)—Ron and Cathy Sandstrom \$1000 Scholarship

Charlotte Straley (Hoyt)—F.E. Schockley KAMS \$600 Scholarship

Tanner Welsh (Bison)—F.E. Schockley KAMS \$600 Scholarship



Tyler Bloom received the Sandstrom Scholarship. Mrs. Cathy Sandstrom was at the reception to celebrate with us.

Kenton Lindsey (Goddard)—E. Eltze Memorial \$1,000 Scholarship

Lane Bigge (Norton)—K. and D. Bahl \$2,000 Scholarship

Perla Camacho (Liberal)— K. and D. Bahl \$750 Scholarship

Avery Pike (Ellinwood)—K. and D. Bahl \$750 Scholarship

Kelsie Whitcomb (Wichita)—K. and D. Bahl \$750 Scholarship

Seth Boxberger (Russell)—K. and D. Bahl \$750 Scholarship

Brianna Wooldridge-Kear (Edgerton)—Rice Graduate \$500 Scholarship

Jamie Spoonemore (Hillsboro)—Rice Graduate \$500 Scholarship

Thomas Broxterman (Hoyt)—Rice Graduate \$500 Scholarship

Chelsea Zimmerman (Hays)—Rice Graduate \$500 Scholarship

Using telethon supporters' contributions, the Mathematics Department was able to award \$500 departmental scholarships to the following students:

Braxton Roth (Decatur, TX)

Mackenzie Smith (Olathe)

Hunter Hays (McCook, NE)

Alejandro Velez-Miller (Leavenworth)

The FHSU Noyce Scholarship Program (co-directed by the Mathematics Department's Dr. Bill Weber), and the SEMI-Steffen Scholarships (directed by Dr. Paul Adams through the FHSU Science and Mathematics Education Institute) continued to support many mathematics majors. Although the FHSU Noyce Scholarship Program was at the end its National Science Foundation awarded cycle, a new renewal application was recently awarded with continued funding over the next several years. In the 2018-2019 year, the following students received about \$65,000 in Noyce scholarship dollars (appx. \$13,000 each):

Perla Comacho-Rosales (Liberal)

Alexis Meinert (Garden City)

Lane Bigge (Norton)

Diana Sabados (Brighton, CO)

Lauren Zerr (Russell Springs)

As in the past, the department is seeking assistance in locating and recognizing high school students and non-traditional students with an interest or talent in mathematics education or mathematics. The department continues to strive for the goal to have at least fifteen well-prepared high school seniors and another five non-traditional students begin their higher education in mathematics or secondary mathematics education at FHSU. We are in great need of assistance from friends and alums to reach this goal. Please take the time to contact us with names of such prospective individuals—then the Mathematics Department will reach out to them and demonstrate the benefit of becoming a FHSU Tiger.

FHSU students and faculty are truly appreciative of contributed dollars from friends of the Mathematics Department. If you have questions about departmental scholarships or have the ability to assist in identifying and/or recruiting possible Mathematics majors from your local region, please contact Jeff Sadler by email at jsadler@fhsu.edu or by phone at (785)-628-4416. If interested in contributing either new or continued funds to any scholarship area, please do so by

sending a check to the Mathematics Department payable to the FHSU Endowment Association—specify the mathematics scholarship fund of interest or the department's unrestricted fund on the memo line.

