NOVEMBER 2023

The Center for Science and Mathematics Education **Monthly Newsletter**

EDITION #3



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Welcome to November



Scientific Adventure for Girls

November is the season of family, friends, and being thankful. The CSME community of students, alumni, staff, and faculty is incredibly grateful for the support we receive. From our individual donors, the university provost, our college deans, and alumni, to all the family and friends who help us pursue, thrive, and persist in STEM education-thank you!

Without the various support you give to CSME, we would not be where we are today, supporting future STEM educators.

Though the semester is coming to a quick close, CSME will continue to share updates and announcements about our programs on page 2. This month we are proudly presenting two more student spotlights, Alejandra Gallardo (SF Math Circle) and Emily Joanne Galeas (Supplemental Instruction).

Happy November! **CSME**

TABLE OF CONTENTS

Page 1 - Welcome

Page 2 - Program Updates & **Announcements**

Page 3 - 6 - Student Spotlight

Page 7 - Giving Thanks

Page 8 - Affiliated Faculty

Page 9 - Events

Page 10 - Opportunities

Page 11 - Recommendations

Page 12 - Feedback/Donate

WHERE TO FIND US

Our main office is located in the Creative Arts building in room 127. Feel free to drop by anytime for a quiet place to study or to grab a snack between classes. You're always welcome at CSME.



Learning Assistants

Join Learning Assistants and become part of a community of inclusive teaching and learning in STEM. You will be able to review material from STEM classes you've taken in a fun and unique way.

Noyce STAJES

The Noyce STAJES program is open to SFSU undergraduate students majoring in a STEM field and to SFSU math or science secondary teacher credential students. If you have any questions, contact Kim Seashore at kimseash@sfsu.edu.

SF Math Circle

SF Math Circle is hosting another math festival on December 3rd at Thornton Hall from 10 am - 12 pm. Registration for spring classes and summer camps will be available starting in mid-November. Sign your 2nd-8th grade kids up to be a part of SF Math Circle today!



SF Math Circle class, 2019

STEM House

Increase your interest and skill in science teaching through STEM House while facilitating fun, handson science courses with 3rd-5th grade students.



STEM House 2019

Supplemental Instruction

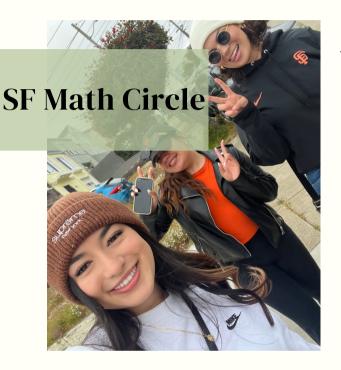
Supplemental Instruction (SI) is still accepting applications for undergrad SI facilitators for the Spring 2024 semester! SI especially needs applicants who have taken (or are currently taking) any of the following classes: CHEM 215, MATH 228, PHYS 111, PHYS 121, PHYS 230, ENGR 205, ENGR 305.

The application can be found on CSME's website. Feel free to email Jessica Fielder at jfielder@sfsu.edu with any questions.

Teacher Fellowship

If you're interested in learning more or joining Teacher Fellows, stop by a future Teacher Fellows meeting. The last one of the semester is December 8th at 4 pm in Creative Arts 126.

STUDENT SPOTLIGHT



Alejandra Gallardo

"I'm Alejandra, and I am from Stockton, California. Currently, I am in my fourth year, pursuing a degree in Mathematics with a Concentration in Teaching.

Before transferring to SF State, I spent two years at a community college, where I earned my AA degree. Outside of academics, I love spending quality time with my family and friends. I also enjoy exploring, having new experiences, and doing new activities in the city!"

What interested you in the SF Math Circle program?

"When I first heard about SF Math Circle, I was immediately intrigued. A colleague of mine had worked for SF Math Circle, and she actually was the person who told me to apply. As I mentioned before, I am a



Mathematics for Teaching major, so engaging in interactive math activities with students, particularly through the exploration of enjoyable math puzzles, appeared to be an ideal job opportunity for me. It seemed like it would allow me to enhance my teaching skills and gain experience working with diverse student populations."

CSME Staff Spotlight



Sarah Sahajlan, Student Assistant

Sarah is an international student in her 2nd year, majoring in Computer Science. Her hobbies include painting, listening to music and cooking. She loves being creative and artistic, so she has been decorating the office's hallway with a new monthly theme surrounding awareness to different causes.

November is also Sarah's birthday month—happy birthday, Sarah!

What are some of the most memorable experiences you've had being a part of this program?

"SF Math Circle gives us the opportunity to collaborate with different elementary and middle schools. Among these, Willie L. Brown Jr. Middle School has been a very fulfilling experience for me. I have seen so much mathematical growth from students at this school. I eagerly anticipate reuniting with them this semester. Seeing students make breakthroughs and become more confident in their mathematical skills has been the most rewarding experience.

One student in particular seemed nervous to try something out and be wrong about it. In SF Math Circle, we want to encourage students to try things out, even when we might be wrong. Trying things out provides us access to additional information, and making mistakes is not bad. This student initially exhibited reluctance to attempt tasks due to the fear of making errors. However, after attending Math Circle classes for over a year, they have embraced the idea that making mistakes is an acceptable part of the learning process. As a result, their willingness to engage in various activities has grown, improving their mathematical thinking skills and overall confidence."

How have you benefited or grown from this experience?

"Being a facilitator for SF Math Circle has allowed me to take on a leadership role and gain valuable teaching experience. This experience is especially valuable considering I am pursuing a career in math education. Working with students of different ages and skill levels has taught me adaptability and flexibility in my teaching methods. Witnessing students' growth and enthusiasm for math has been incredibly fulfilling. Overall, being part of SF Math Circle has been a transformative experience, allowing me to grow both personally and professionally while making a positive impact on the lives of our students. It's an opportunity to contribute to the broader goal of fostering a love for mathematics and critical thinking in the next generation."

What advice can you offer someone who wants to join this program?

"If you're interested in joining SF Math Circle as a facilitator, here are some valuable pieces of advice to consider. SF Math Circle has taught me that math is not just numbers and arithmetic. Math is a way of thinking. Our goal as facilitators is to encourage students to adopt a growth mindset in order for them to grow inside and outside of the classroom. If you have a passion for mathematics and teaching, SF Math Circle is an awesome way to gain teaching experience while also sharpening your own problem-solving skills."

STUDENT SPOTLIGHT



Emily Joanne Galeas

"My major is Physics, and I am currently in my fifth year (hopefully the last)! I am also minoring in Mathematics. I am interested in pursuing a career in research or maybe even becoming a physics professor at a college or a teacher at a high school.

Ultimately, I want to contribute to the scientific community/my community in general. :) Outside of school, I love to draw, roller skate, dance, and hang out with close friends and family. I also love playing video games on my computer."

What interested you in the Supplemental Instruction program?

"What interested me in the SI Program was my PHYS 220 professor, Dr. Tennant. She motivated me to apply for the program as I had excelled in her PHYS 220 course. Additionally, I had already taken a SCI



course for Calculus II and I loved the atmosphere of the class, as well as my facilitators. I also already had a predisposition to try out teaching and I knew this would be the opportunity to try it out. This all inspired me to join the SI Program as a facilitator."

CSME Staff Spotlight



Kristen Vargas, Administrative Analyst

Kristen is a Bay Area native, born and raised in San Francisco. She is a graduate of UC Berkeley in Computer Science and later attended SF State to earn her secondary degrees in Corporate Finance and Financial Services.

Kristen joined SF State in 2022, but prior to that, she worked as a public auditor and lived abroad in Japan and Korea. This will be Kristen's 2nd year with CSME, and she loves that her position combines her desire to work in the education field along with her finance background.

What are some of the most memorable experiences you've had being a part of this program?

"I have had a few memorable experiences throughout my time as a SCI facilitator. I recall the first SCI course I had ever facilitated, my co-facilitator and I gave an opportunity to our students to share their reflective journal responses, and one of our students volunteered. I can't remember exactly what her response was, but I remember she got emotional while sharing, and everyone was moved by her reflection. This made all the other students eager to share and strengthened the sense of community in our class. It was a beautiful moment, honestly.

Another memorable experience was having a student come up to me after the last day of our SCI class and thank me for being so helpful and supportive throughout the semester. They told me that my SCI course alleviated some of their anxiety and made their Mondays better. I couldn't be happier in that moment."

How have you benefited or grown from this experience?

"I feel like the SI Program has allowed me to grow so much as a person and as a student. It has given me some invaluable skills that I know I will use for the rest of my life. I have learned how to be a better leader by being patient, compassionate, and supportive. It has also taught me how important it is to work collaboratively with others towards a shared goal. Additionally, being a SI Facilitator has strengthened my passion for serving my community all the while talking about physics and math, something I am already very passionate about. I am very grateful for all my experiences with the SI program."

What advice can you offer someone who wants to join this program?

"Some advice I'd give to someone who wants to join the SI Program is to just go for it, and make the most out of it! There is no doubt that you will benefit from joining the program as you will not only be reviewing material from a previous course that you have taken, but you will be mastering it, AND helping others grasp that material. Your experiences are what you make of it, so take everything as a lesson and learn from everything. Talk to your students and learn about their stories and become inspired. That is my advice for someone who would like to join the SI Program as a Facilitator."

Thank you!

CSME would like to thank all those who continue to support us and our future STEM teachers.



And thank you to our students, staff, and faculty!

CSME Staff Spotlight



Jessica Fielder, Supplemental Instruction Program Director

Inspired by her high school chemistry teacher, Jessica originally wanted to study chemistry before falling in love with astronomy in general and black holes specifically. She came to SF State for a Master's degree in Physics in 2004 and had the life-changing experience of teaching astronomy in a planetarium for the first time.

Jessica stayed on at SF State as a lecturer in physics and astronomy, and now splits her time between teaching and running the Supplemental Instruction program in the College of Science and Engineering.

Want to be featured or recommend someone for our next student spotlight? Email lsao@sfsu.edu

CSME AFFILIATED FACULTY

Stephanie Sisk-Hilton

Stephanie Sisk-Hilton is a Professor in the Department of Elementary Education. Her teaching and research focuses on the intersections of children's science learning, cognition and development, and collaborative teacher learning. Her current research focuses on how young children can come to understand and use challenging science concepts when they are engaged in pedagogically ambitious approaches to teaching and learning. She has also done extensive research into how teachers



develop and share science teaching knowledge through collaborative professional development.

At SF State, Stephanie co-coordinates the intensive one-year Multiple Subjects Teaching Credential Program and focuses on building teaching and learning partnerships between the teacher education program and the elementary schools that mentor future teachers.

Stephanie received certification through the National Board for Professional Teaching Standards and has taught elementary and middle school in Prince George's County, MD; Atlanta, GA; Brooklyn, NY; and Oakland, CA. She has also worked extensively as a teacher professional developer, dealing with school-wide curriculum reform, science curriculum, and pedagogy.

CSME EVENTS

Coffee Corner



Curious about CSME? Interested in learning more about our programs? Want to know more about becoming a teacher?

Visit our CSME office in person and get your questions answered over a cup of tea and some snacks. We are here for you.

Stop by and receive free CSME swag.

When: In person every Wednesday, 12 pm - 1 pm

Where: Creative Arts 127

Can't make it in person?

Join us online every Friday,

1 pm - 2 pm

Zoom ID: 829 3522 5159

Passcode: 0xSCjv



Socials/Fairs

National American Indian History Month

Starting November 1st is National American Indian Heritage Month. Celebrate this month by attending a local event for empowering and honoring Native American history in San Francisco.

When: Wednesday, November 16

4 pm- 7 pm

Where: Haas Lilienthal House, 2007 Franklin Street, San Francisco, CA 94114 Visit their website to learn more about this event and purchase your ticket https://www.sfheritage.org/events/american-indian-heritage-month/

All the proceeds from this program will benefit their partner organizations and the American Indian cultural preservation work in San Francisco.

Multiple Subject Credential Program Information Meeting

This Information Meeting is designed to inform prospective students about the program, how to apply, and the best possible ways to meet the requirements for admission into a Credential Only or Credential Plus Masters Program in Elementary Education

When: Thursday, November 30

2 pm - 4:30 pm

Where: Burk Hall 238

Visit the Eventbrite webpage to register https://www.eventbrite.com/e/multiple-subject-credential-program-information-meeting-tickets-711632290337

SF Math Circle Festival

A festival for 2nd - 8th grade students and their families to explore the fun side of math in an accessible and engaging way.

When: Sunday, December 3rd

10 pm - 12 pm

Where: Thornton Hall

Teacher Fellows Fall 2023 Seminar

Interested in learning more about the Teacher Fellows program? Attend a seminar and learn more information.

When: 11/3, 12/8 4 pm - 6 pm

Where: Creative Arts 126

STAJES Fall 2023 Seminar

Dear STAJES members, don't forget to attend your monthly seminar meetings.

When: 11/17, 12/15

4 pm - 6 pm

Where: Creative Arts 126

CSME OPPORTUNITIES

Scholarships

Teacher Fellows

Interested in becoming a K-12 STEM teacher and gaining support from a community of like-minded students who love science and math?

Consider joining Teacher Fellows and gain experience in the field while earning \$300 - \$1,500 a semester.

<u>Visit our website</u> to learn more about Teacher Fellows and consider applying to our program.



Three Teacher Fellows

Support

Campus Resources

SF State has an abundance of on-campus resources for students ranging from food/shelter support to equity support.

Visit the student resources website at studentresources.sfsu.edu/resources

If you're having trouble during this school year and need to talk to someone, visit CAPS (counsling and psychological services) https://caps.sfsu.edu

Find academic support at SF State's Tutoring and Academic Support Center (TASC). Visit their website at tutoring.sfsu.edu

Job Opportunities

SF Math Circle

Earn at least \$19/hour to work with small groups of elementary or middle school students as they explore interactive, hands-on puzzles and games.

Contact David Klein at dklein@sfmathcircle.org

Supplemental Instruction

Applications are accepted on a rolling basis until all open positions are filled. Applicants will be contacted via email to set up follow-up interviews within a week or so after submitting their applications. Visit our website csme.sfsu.edu/SI to find an application.

CMC-N Annual Math Conference Volunteers

Student volunteers needed December 1st - 3rd. California Mathematics Counsel North is a committee dedicated to math education and serving teachers.

Student volunteers will receive free conference registration and a \$25 voucher.

For more information on this event or to register, <u>visit the CMC-N website</u>. Teacher Fellows interested in volunteering may contact Kim Seashore (kimseash@sfsu.edu) for accommodations support.



Fall 2023 Learning Assistant Class

RECOMMENDATIONS/PUZZLE CORNER

CSME's Monthly Book List

Part of the CSME mission is to confront racism, discrimination, and anti-blackness to create a culture of inclusion in the world around us. We would like to share a selection of books and articles to help inform our community of ways we can be conscious of issues surrounding injustice while celebrating the different cultures and identities that make our community meaningful.



Becoming Scientists

by Rusty Bresser & Sharon Fargason

Using inquiry science, children discover answers to their questions in the same way that scientists do—they design experiments, make predictions, observe and describe, offer and test explanations, and share their conjectures with others. In essence, they construct their own understanding of how the world works through experimentation, reflection, and discussion. Look into real classrooms where teachers practice inquiry science and engage students in the science and engineering practices outlined in the Next Generation Science Standards.

Free copies are available in our office CA 127

There's Something In The Water: Environmental Racism in Indigenous & Black Communities

by Ingrid R.G. Waldron

In "There's Something In The Water", Ingrid R. G. Waldron examines the legacy of environmental racism and its health impacts in Indigenous and Black communities in Canada, using Nova Scotia as a case study, and the grassroots resistance activities by Indigenous and Black communities against the pollution and poisoning of their communities.





Takeaway - 2-player game.

- Start with a pile of 20 chips.
- Each player takes turns removing chips from the pile.
- On each turn, a player can remove either 1 chip or 2 chips.
- You win if you take the last chip (or chips) so there are no chips left.

Stop by the CSME office and challenge one of our staff to a game. Beat them and win a prize!

Congratulations to last month's puzzle corner winner, Loan Tran!

Last month's puzzle corner answer: \$9.54



Do you have an interest in puzzles like this and teaching kids? Join SF Math Circle and teach 2nd - 8th grade kids while gaining teaching experience. Visit our opportunities page (9) and find out how to join.

FEEDBACK/DONATE

We Would Love to Hear from You!

Your support and input at CSME is important to us. Let us know if you have feedback you'd like to offer—suggestions for student/teacher spotlights, book recommendations, etc. Have a club you'd like to advertise? Let us know about it!

Feel free to leave comments through the QR code or link provided! https://sfsu.co1.qualtrics.com/jfe/form/SV_0ujtaHCjM08PPp4



Q&A

Got more questions about the Center or one of our programs? Fill out our Qualtrics survey and we'll get back to you ASAP.

Feel free to leave any questions through the QR code or link provided. https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV 1YRXJxYRd5O9dNY



Keep Up With CSME News!

Subscribe to CSME's Mailing List and receive updates and announcements, including our monthly newsletters. Subscribe by clicking the link or scanning the QR code: https://qfreeaccountssjc1.az1.qualtrics.com/jfe/form/SV_2s1liWxVkuEPqu2



Donate to CSME

If you'd like to help CSME continue to support equity on our campus and across the Bay Area, please consider a donation to our program. Visit our website at <u>csme.sfsu.edu/donate</u>, click the 'Support CSME' dropdown menu, and select donate.

If you're interested in discussing a donation, contact our director, Tendai Chitewere (tendai@sfsu.edu).

Thank you!