COS Book of Science
2014-2015 STEM Yearbook
Our STEM Community:

The College of the Sequoias Science, Math and Engineering Division has a dedicated staff and faculty who work extremely hard to create a welcoming learning environment for our students.

Robert Urtecho, Ph.D.

Under the leadership of Dr. Robert Urtecho, the division has developed excellent support services through the Math, Engineering, Science Achievement (MESA) Program, The Promoting Achievement and Scholarship through Enrichment Opportunities (PASEO) Program and the new Student Undergraduate Research Group Experience (SURGE) Program.

Faculty members challenge their students and ensure that when they transfer to universities they are ready to thrive academically. COS faculty members are engaged with their students outside of class by participating in field trips, professional conferences and club meetings. They share their educational experiences, research and are excellent mentors. Many faculty give research presentations at SETA and BioFORGE club meetings. They take pride in helping students with recommendation letters and helping select students for scholarship awards.

The MESA Center provides a friendly, student-oriented study center with tutoring and supplemental instruction provided by the MESA and PASEO programs. In the center, students study with friends, eat and socialize in the back room and work with the MESA/PASEO coordinators and the STEM counselor. Officers and members of the four campus science clubs meet there to discuss and plan club activities.

Participation in the programs and clubs allows student opportunities to make friends, visit Universities, attend conferences, help with community service activities, and, most importantly, join the COS STEM family.
A Word from our Advisors

Charles Rush
PASEO Activity Lead & SHPE Chapter Advisor

“This has been a busy and productive year with many activities and great accomplishments. I am very proud of the PASEO students and others who have worked so hard. We are saying goodbye to many awesome transferring students, but I’m happy that we have welcomed so many terrific new students! I look forward to working with you all again next year.”

Duane Goodwin
MESA Director & SHPE Chapter Advisor

“It has been an honor to work with a wonderful group of Science, Technology, Engineering and Math majors. Students have been involved in more volunteer projects, program activities, and professional development than any other past years. We have had students awarded internships expanding across the country and through our new SURGE grant we have created research opportunities on the COS campus. Our list of transferring students is impressive; students are going to UC Berkeley, UC Davis, UCLA, CSU Fresno and other great institutions. Through MESA, PASEO and SURGE COS Students have created a culture of success, collaboration and inclusion. This has led to both professional and academic acceleration. It is awesome to help guide and lead a great group of young adults, emerging professional and future leaders. I have gotten to know many students personally through university visits, conferences, lab tours or their time spent in the MESA Center. I am extremely excited for students that are transferring; but also saddened because they are like children moving away from home. As I continue to work with current and incoming students, those students that are leaving will truly be missed.”

Dr. Larry Owens
Engineering and Physics Instructor & SETA Club Advisor

“It’s amazing how far we have come in the last 10 years! SETA was started when we didn’t have a MESA program or a MESA center at COS. Our meetings were attended by about 10-12 students - 3 pizzas was enough to feed everyone! It is exciting to see how SETA has grown to meetings of 70-100 students, how our STEM programs now include MESA, PASEO and SURGE, and how we are adding new clubs for specific interests. Most importantly, we now have a critical mass of students that are engaged in their studies, help each other succeed, and are reaching out to the community to inspire the next group of scientists, mathematicians and engineers. It is a pleasure and an honor to work with such an awesome group of students!”
A Word from our Advisors

Dr. Shannamar Dewey
Assistant Professor, Anatomy and Physiology & BioFORGE Club Advisor

“2014-2015 was the inaugural year for BioFORGE, the new club on campus emphasizing research in the biological sciences. Meetings consisted of presentations from COS professors as well as several visiting professors from nearby universities including UC Merced. Fascinating presentations have included a range of research spanning from the relatively recent anthropological conundrum of a smart hominid with a small skull to proteins that regulate a circadian rhythm by changing three dimensional shapes in oscillating, slowly consistent 12 hour cycles. I feel like I have mostly been invited along for the ride while these motivated students have leapt at the chance to create their vision but I have been happy to use my resources and connections in research to further their goals and exposure. I look forward to supporting these students and helping to shape the future of BioFORGE!”

Tricia Sanford
Mathematics Instructor and Math Club Advisor

“The COS Math Club re-established in 2014-2015. We had an exciting year with members presenting for EYH and LYLA. Students prepped and participated in the Student Math League test given in the Fall and Spring. We also attended the Undergraduate Math Conference in Thousand Oaks. We celebrated Pi-Day by having a contest to see who can remember the most digits of Pi and donated around 100 Mathematics textbooks to our student body. Elizabeth Owens, a recent Graduate from UC Merced gave a presentation about her experience as an Applied Mathematician. It has been a pleasure working with future mathematicians, and we look forward to cultivating more mathematics majors.”

Michael Springer
Chemistry Instructor and Co-Advisor of the ACS Club

"It has truly been a pleasure to serve as co-advisor for the ACS club during last year. I am amazed at the level of passion, dedication, and creativity that these students demonstrate. The activities and presentations that the group arranged were a great way to pique scientific curiosity and begin more detailed discussions about the phenomena at hand. All of these students have very bright futures and I’m excited to have been part of their journey!"
2014-2015 SETA Members

Allen, Cole
Aparicio, Ana
Atondo, Dieddra
Bardone, Andrew
Berlin, David
Brown, Courtney
Nathan Brown
Cagnino, Christian
Cardenas, Samuel
Carranza, Michael
Castaneda, Xavier
Chitay, Ivan
Deuser, Mathew
Doria, Stephanie
Figueroa, Matthew
Friass, Anyssa
Garcia, Lizbeth
Gomez, Mauricio
Juan Gonzalez
Gordon, Eric
Guerrero, Roque
Hamilton, William
Hendren, Alex
Lambert, Isabel
Martinez, Yelena
Martinez-Camacha, Daniella
Molina, Matthew
Monarrez, Cesar
Members that are too cool for a picture or gone on picture day
SHPE Chapter
Society of Hispanic Professional Engineers

BioFORGE Club
Biology and the Future Of Research and Genetic Engineering
Math Club

American Chemical Society
SACNAS National Conference
Society for the Advancement of Chicanos and Native Americans in Science
Los Angeles, California
MESA Leadership Retreat
PG&E, San Diego

Expanding Your Horizons
“inspiring the next generation of scientist”
Epic STEM Adventure

“Valley of Fire, Toroweap, Zion, Grand Canyon-North Rim”

SETA Holiday Party
Pacific Coast Undergraduate Mathematics Conference
“California Lutheran University”

Latino Youth Leadership
MESA Leadership Retreat
“Happy Valley, Santa Cruz”

SHPE
“Giant Sequoias Camping”
Thank you to our MESA & PASEO staff!
Notes ~ Signatures ~ Memories