

MESA Milestones

Featuring momentous affairs of the MESA program at Allan Hancock College

Fall 2022

Allan Hancock College Joins Central Coast Colleges to Support Underrepresented STEM Students

by Public Affairs and Communications, Allan Hancock College

Allan Hancock College is joining seven Central Coast colleges to ensure bright futures for underrepresented students pursuing an education in science, technology, engineering, and math (STEM) disciplines thanks to a prestigious national grant.

For the second year in a row, all eight Central Coast community colleges - Allan Hancock College, Cabrillo College, Cuesta College, Monterey-Peninsula College, Moorpark College, Oxnard College, Santa Barbara City College, and Ventura College - are working collectively to support students through the National Science Foundation's Louis Stokes Alliances for Minority Participation Bridge to the Baccalaureate (LSAMP/B2B) grant. The group, called the California Central Coast Community College Collaborative, or C6, was the first group of California community colleges to receive the grant.



Civil Engineering student Ruth Morales is one of many MESA/STEM students who benefit from the Central Coast Community College Collaborative's LSAMP/B2B program.

Named in honor of Louis Stokes, the first African American congressional representative from Ohio, the grant seeks to expand opportunities for students from underrepresented communities to pursue STEM degrees and careers by providing them with access to financial, academic, and career support.

"We are very excited to leverage our resources across the C6 alliance for the greater central coast community," said LSAMP grant co-principal investigator Dominic Dal Bello, a professor of engineering and chair of mathematical sciences at Allan Hancock College. "We are implementing embedded tutoring at each campus, and building a network between our colleges, local industry, neighboring universities and alumni to support and motivate our STEM students to transfer and succeed at the university."

Through the collaborative efforts of the C6 colleges, STEM students can access a wide array of support, services, and resources. These include peer and faculty support, special access to research and internship opportunities, site visits to universities and STEM-related companies, the chance to participate in a student research symposium attended by STEM leaders, and more.

The combined efforts of the colleges, including Allan Hancock College, created a unique and vital pipeline of support for students like Ruth Morales, who is currently studying civil engineering at Allan Hancock College. Morales is one of many Central Coast students who presented findings from their research project at C6's Research Symposium in October at Cal Poly San Luis Obispo.

“Taking on STEM major can be really challenging, especially if you’re first generation-college student like me,” said Morales, who plans to transfer to Cal Poly, San Luis Obispo, and eventually pursue a career in water resource management. “But having a support system with mentors and instructors and other students who are there to help you is really motivating. It keeps me going even when things get difficult.”

Morales is just one of many students currently benefiting from the support and resources the grant provides, and there’s always room for more. The program is open to STEM students from underrepresented populations from Allan Hancock College and any of the other participating colleges. To learn more about the C6 LSAMP program, visit <https://www.hancockcollege.edu/lsamp/>.

From Unfamiliarity to Belonging

by Liliana Buenrostro, STEM Student, Chemistry

Before beginning college, I was unsure of what career path I wanted to pursue. I remember liking science when I was younger, but I couldn’t decide between biology or chemistry as my major. Also, the idea of one day finishing school seemed more frightening than exciting to me since going to school was all that I knew.

Thankfully, this uncertainty changed one year ago once I began my first in-person chemistry course in college. The class, or more specifically the teacher, reignited my passion for chemistry since his love for the subject made me even more excited to learn. Even after completing the course, these feelings remained as I began taking other chemistry courses. To my surprise, the same professor reached out to me asking if I had any interest in becoming the embedded tutor for his class, which I gladly accepted. Since I had never been a tutor before, let alone one in college, I was excited while also nervous. One concern I had was being unable to answer every question that the students asked me. However, with the help of my friends and other teachers, I realized that I am not an expert in the subject, so I shouldn’t expect myself to answer every question that the students ask. I had to realize that I’m only a student who has much more to learn as well.



As expected, no college journey is complete without some hindrances. For example, one class that I struggled with was physics, so much so that I had to retake the course. Instead of allowing this setback to negatively affect me, I used it as a means of motivating myself to focus wholeheartedly, attempting to fully understand the material and doing the best possible job that I could. As of now, I am feeling much more comfortable with the information, especially now that I have other physics classmates and friends that I look towards for support.

Although I haven’t fully decided on what specific job I’d like to have, if all goes well with my future courses at Hancock, then I see myself transferring to UCSB to major in chemistry. I not only want to thank my parents for their constant support of my interests and passions but also my eighth-grade science teacher, Mr. Brickey, for being the reason for my interest in the subject as well as my Chem 150 professor, Dr. Gottlieb, for allowing me to remember what I loved so much about chemistry in the first place. Each of them played an important role in making me the person I am today, and I hope they know how much I appreciate and respect them. Without them, I would most likely still be struggling to decide what to do with my education.

So what I wanted to say is thank you, to everyone. I look forward to meeting new people and sharing new experiences with them during my academic career.

Some thoughts on Obstacles, Following Instructions, Test-Taking, and Resources

by Dominic J. Dal Bello, Professor, Engineering and Chair, Mathematical Sciences

OBSTACLES

Many students put obstacles in their paths, whether they realize it or not. As engineering students, you are likely taking a full load of courses. You should schedule an appropriate amount of time for studying outside of class. AHC's catalog says students should study at least two hours outside of class for every one hour in class. STEM students should study closer to three hours to one class hour. Better it should be... "Study until you understand it." Also, do not exceed the "60-hour Rule;" Class time + study time (3:1) + work hours should not exceed 60 hours total.



Perhaps more importantly than "number of hours," is the fact that you are taking courses that are foundational to your career. If you cannot put sufficient effort into them, you will not be successful in the next courses (let alone the current course). Sophomore level engineering courses are not electives. They will greatly affect your success in the next classes.

I have learned that some of you are spending one to four hours per week studying for my engineering course. These values are unacceptable. If I am spending more time than you trying to get you to learn the material, something is wrong.

Practice, work with others, go to review sessions and study groups, talk to the tutors, and come to office hours.

A couple of "obstacles" that a few of you put in your path are:

- not reading/following instructions
- not having good test-taking strategies
- not using resources

FOLLOW INSTRUCTIONS

This is the first rule to follow for any employee or member of a group. If you cannot follow instructions, how can you fill out an application?

Applications that are filled out incorrectly are discarded (if your Cal Poly Application has even a small error, it can jeopardize your ability to be accepted).



Some of you do not do what is asked, or you do exactly the opposite of what is asked. What am I supposed to write on letters of recommendation? “Johnny is a good student but does the opposite of what he is asked to do”?

Read the distributed information and comprehend it – whether that is the syllabus [the rules of the class], the Lab Manual, handouts, exam instructions and problems statements.

TEST-TAKING

- Follow instructions
- Do problems you know how to do (“easy” problems first)
- Check your work
- It is better to do three problems very well + one badly, than four problems not so well

RESOURCES

As engineering students at AHC, you have more resources today than ever before, and more than most community colleges have.

- The MESA/STEM Academic Success Center is a goldmine for students; not many schools have a center like ours, let alone tutors who have taken the classes before.
- MESA/STEM Organized Study Groups/Review Sessions have been around for many years, and provide you with scheduled opportunities to study. You should either attend them, or set aside scheduled times each week for studying. Planning your study time helps keep you on track.
- MESA/STEM Staff... the MESA/STEM counselors and the programs are excellent. Other schools seek out our counselors for advice on transfer (one engineering professor at a community college brought four students to AHC to get their SEP done by our counselors).

Email Communication Tips

- *Email is the professional means by which to communicate*
- *Don't send a message you don't want to risk being forwarded to someone else*
- *Don't hit the “send” key until you had time to cool down if you are upset*
- *Don't forward chain emails*
- *Don't spread hoaxes about viruses or false threats*
- *Don't type in all CAPS (it means you are yelling)*
- *Don't be too casual (as with texting)*
- *Don't forget important details*
- *Don't hit the “reply all” key when you meant to hit “reply”*
- *Don't forget to complete the subject line*



Resources that many community colleges have, but students do not utilize as much as they could:

- Other engineering students ... create study groups that meet consistently. Smart students work in groups to grow academically and for mutual support.
- I have three office hours per week. I am usually on campus 50+ hours per week, so if you cannot make office hours, you could likely make an appointment.

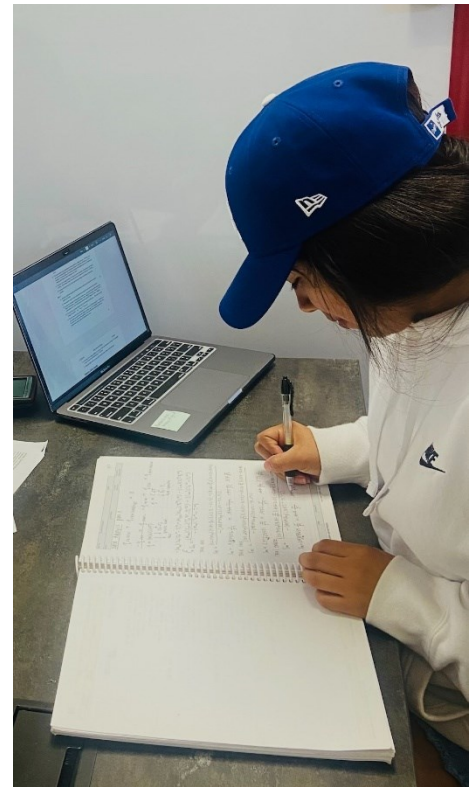
Do not take our resources for granted.

Pursuing Dreams... for Me and My Family

by Zayra Hernandez, MESA Students, Civil Engineering

I cannot separate my academic and career goals from my family: by growing up in a single parent household, I developed the courage and motivation to work for my ultimate goal, attending a four-year university and becoming a civil engineer. My mother wasn't able to go to school due to her financially supporting her family; therefore, her struggle has influenced me to get an education because I know going to a university will open opportunities.

My career goals are aligned with my studies, and I plan to work for a company of my own in the role of a civil engineer; I want to graduate and receive a master's degree in civil engineering. The idea of being out in the field is especially interesting to me as I want to see the real-life application of designs. During high school I took a course in which I learned the different types of engineering. In my class, my team and I were given a prompt that had us work together to design a transit center. This influenced me to keep on pursuing civil engineering because I knew that it would not only benefit me but it would also help solve issues in my society. This allowed me to have hands on experience with a situation as a civil engineer which only made me excited for what was to come.



Moreover, I've wanted to pursue this career ever since I first came across the profession because it spoke to me on a very personal level: my family has never owned their own home, and I aspire to leverage my skills as a civil engineer to give back to my community, by building more schools and homes for low income families like mine. I want to design buildings that haven't been built before and also bring people's creative ideas into reality. I view civil engineering as a way to bridge culture, traditions, and need. With a great career comes great accomplishments; I can't wait to be able to purchase a house for myself and one for my mom. In fact, it would be a dream come true if I were able to build our homes.

I know that I am capable of accomplishing anything as long as I am determined. I plan to be able to care for my mom so that one day, she no longer has to endure the grueling labor of agricultural work. I want to inspire not just my family, but my community. I want to be a symbol of perseverance and of grit. I want to show that no obstacle is impossible to overcome. I know that by graduating from a university and obtaining a career, I can prove to my younger siblings that even though our mom wasn't able to finish her education, we can.

We do not always have to follow the path of our parents. We can be successful in ways they were unable to reach.



Don't delay! Now is the time to invest your time and energy into securing 2023/2024 scholarships and summer 2023 internships! See the links below and learn about securing scholarships and internships – two invaluable components of a STEM education.

<https://www.hancockcollege.edu/mesa/Scholarship.php>

<https://www.hancockcollege.edu/mesa/MESAinters.php>

The only thing standing between you and scholarships/internships is your effort to make it happen. If you need help, see your MESA/STEM Academic Success Center for assistance. Make it happen for yourself. You will never regret it!

E5 – Enticing, Engaging and Empowering Emerging Engineers Program is Back!

by Angelica Eulloqui, MESA/STEM Counselor



We are excited to announce that the E5 – Enticing, Engaging and Empowering Emerging Engineers Program is back and here to support our female pursuing engineering majors.

We kicked off the semester with an Information Session. The ladies came together in person and via zoom to learn more about the program and to connect with one another. Great discussion was sparked at this first meeting.

We will host our next event on November 18, 2022. We are looking forward to continuing to build community with our female engineers and connecting them with professional growth opportunities.

During the spring semester we will run our PATH Network meets up, workshops and industry field trips. Please encourage females pursuing engineering to get connected.

To learn more about the program please visit our website.

<https://www.hancockcollege.edu/mesa/womenengineers.php>

MESA/STEM Academic Success Center Offers Non-Credit Personal Development Class for STEM Students New to AHC

by Christine Reed, MESA/STEM Academic Success Center Counselor/Coordinator

Joining forces with the AHC Counseling Department, the MESA/STEM Academic Success Center offered new STEM students to AHC the opportunity to connect to the college. Offering PD 700 – College Connect – for the first time, focused on STEM students, the MESA/STEM team met with registered students for four Fridays in M500 to:

- Explore college norms and culture including academic policies/procedures and instructor and student expectations
- Discover student support systems such as student service programs and academic support services
- Learn about financial aid including grants, loans, scholarships, and work study
- Tour the campus, develop a weekly study schedule and set goals

Additionally, students were hosted by Hardy Diagnostics for a tour and lunch on their final day of class.

The effort was a success and will continue into future semester.



STEM Students New to Hancock, TAKE THIS CLASS FOR FREE!

PD 700 - College Connect - STEM

CRN: 21806 | Room M312 | September 9 - September 30 | Fridays 12 - 2 p.m.



Instructor: Christine Reed, MESA/STEM Academic Success Center Counselor/Coordinator
Christine has more than 27 years of counseling experience at Allan Hancock College with an expertise in STEM and university transfer. Join her for four Fridays in September and invest in your STEM academic success as you explore college culture, resources, and services for STEM students at Hancock. Topics include characteristics of a successful STEM student, as well as strategies and essential tools to ensure a successful college experience.

How do I register online?

Log on to myHancock using your username and password. Select Student tab, then Register/Add/Drop/Search Classes. For detailed instructions, view the How to Register video.



Registration form link:

<https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:b0cbb394-9d#f2-3ald-9289-246f64ccf5cc>

Fall 2022 MESA/STEM Activities

Sept. 23— “Start Here” MESA Program Convocation - 10:00am-11:30am, breakfast served; M-500 Patio
Sept. 30— E5 Women in Engineering Information Session - 10:00am-11:00am; Hybrid: M-502 & Zoom
Sept. 30— STEM Academic Strategies: Setting Yourself Up for Success - 3:00pm-4:30pm; Hybrid: M-502 & Zoom
Oct. 7— UC Admission Application Personal Insight Question Workshop - 2:00pm-3:00pm; Hybrid: M-502 & Zoom
Oct. 12— Scholarship Strategies for STEM Students - 2:30pm-3:30pm; Zoom
Oct. 14— Central Coast Community College & Cal Poly Summer 2022 Research Symposium - 8:00am-6:00pm; Field Trip
Oct. 21— UC Admission Application Personal Insight Question Workshop - 1:00pm-2:00pm; Hybrid: M-502 & Zoom
Oct. 28— Maintaining Academic Integrity: What STEM Students Better Know - 12:00pm-1:30pm; Hybrid: M-502 & Zoom
Oct. 28-29— 2022 MESA Student Leadership Conference in San Diego, CA (by recommendation from Christine Reed)
Nov. 18— SB Foundation Scholarship and FAFSA workshop - 1:30pm-3:00pm; Zoom
Dec. 2— Internship Strategies Workshop - 2:30pm-3:30pm; Hybrid: M-502 & Zoom
Dec. 8-9— UCLA/Blue Robotics (LA) Overnight Field Trip (sign-ups start in November)

UC/CSU Application Workshops — APPLICATIONS DUE NOVEMBER 30, 2022

Oct. 7— UC/CSU Application Workshop - 12:00pm-2:00pm; Hybrid: M-502 & Zoom
Oct. 21— UC/CSU Application Workshop - 11:00am-1:00pm; Hybrid: M-502 & Zoom
Nov. 2— UC/CSU Application Workshop - 12:00pm-2:00pm; Zoom
Nov. 18— UC/CSU Application Workshop - 11:00am-1:00pm; Hybrid: M-502 & Zoom

The Mathematics, Engineering, Science Achievement (MESA)

Program is an academic program that provides a wide range of support services and activities aimed at fostering student achievement and increasing the success and participation they experience while pursuing a degree in mathematics, engineering, computer science, biology, architecture, kinesiology, or other science-based programs. MESA enables students to prepare for and graduate from a four-year university with a math-based degree. It also seeks to increase the diverse pool of transfer-ready community college students who are prepared to excel as math, engineering and science majors. Through the program, students develop academic and leadership skills, increase educational performance, and gain confidence in their abilities to compete academically and professionally.



Visit our website at www.hancockcollege.edu/mesa.

