

STEM Division Summary For Division Review 22-23

Programs Read

- Biology
- Chemistry
- Computer Studies (CS, CNT)
- Engineering & Engineering Tech
- Environmental Studies/Science
- Geography
- Geology
- Horticulture
- Math
- Occupational Health & Safety
- Physics and Astronomy
- Viticulture

Section A: Accomplishments & Notable Items

Overarching Themes: Accomplishments

Programs in STEM have many accomplishments aligned with the College mission and vision despite limited resources and increased demands. Faculty and classified professionals demonstrate a high level of innovation and collaboration at multiple levels. Faculty and classified professionals are highly engaged in shared governance, leadership roles (Senates, union), and multiple initiatives and priorities (examples include UnDocuAlly, OEI, FCI, Guided Pathways, Puente, Umoja, EB-CAN, Persistence Project). Programs are committed to inquiry and advancement around issues of equity. There are numerous examples of receiving grants, offering new classes or certificate programs and partnering both within LPC and with community agencies and programs. There are strong relationships with industry, non-profits, and educational partners. Communities of practice and professional development activities support faculty and classified professionals. The STEM division has hired new FT and PT faculty and classified professionals who have already positively influenced students, programs, and the college. Program coordinators work with their teams and collaborate across disciplines and divisions to optimize

pathways for students, remove barriers, avoid scheduling and space conflicts, and recognize the workflow of our classified professionals. An exemplar is the use of matrices to optimize scheduling. For example, physics/engineering/chemistry/biology/math/computer science coordinators collaborate to schedule majors level classes together on a shared matrix to avoid scheduling conflicts and maximize opportunities and choices for students taking courses in other disciplines. Other examples include pre-nursing (biology and chemistry), engineering technology (spanning 3 departments in STEM and across to the PATH division), and GE (spanning all GE-offering departments). All modalities (DE, Hybrid, HyFlex, and in-person) are offered for students to maximize enrollments and meet student needs. Several programs and the Computer Center were among the first to return to face-to-face teaching and in-person student support. There are a number of communities, industry, educational, government, and campus collaborations and partnerships in STEM, with several addressing underserved or at-risk populations. Facilities work has been extensive in the STEM Division with the opening of a new Horticulture building/greenhouse complex, groundbreaking of Viticulture and Winery Technology teaching winery), and initial planning for a new STEAM complex in collaboration with Arts and Humanities. Several groups (Computer Studies, Computer Center, Math Learning Center, Math Emporium, faculty offices. Division Office) have prepared for years for the move into the new Building 2100 later in 2023.

Program Specific Notes (Alphabetically by program)

Biology

- Expanded faculty - hired a replacement FT faculty member to teach Cellular and Molecular Biology
 - This was a goal and top priority in the 2021-2022 Program Review as the position had been vacant for three years.
- Developed a new successful SmartShop workshop for Anatomy and Microscope skills that especially helped online students in the Biology: Allied Health Program.
- Submitted a successful California Learning Lab Grant (\$394K) to support faculty in adopting active learning modules that are inclusive, group-based, and assessment-driven.
- Hosted a valuable FLEX Day session in Fall 2022 which highlighted educational materials developed and promoted a new community of practice.
- Partnered with SJSU Center for Advancing Women in Technology on a grant (\$75K) to bring Python-based computing models into biology and math (statistics) courses to expose students to new careers and interdisciplinary computing.
- Made significant progress in 3-year NSF ATE grant in development of badging of credentials in partnership with industry advisory board.
- Established new partnership with UC Division of Agriculture and Natural Resources and were able to successfully offer the new California Naturalist Certificate program (class was full with a waitlist)
- Adjusted Field Biology course to P/NP grading which reduces cost and makes the course more accessible for students to take.
- Increased accessibility (in hopes to increase enrollment) to some courses (BIO 2A) by adjusting prerequisites.

Chemistry

- Hired and trained a replacement full time faculty member (vacant for a year) and two adjuncts.
- Offered courses in a variety of modalities, including in-person and hybrid.
- SLO data was analyzed, and no equity gaps were observed related to race and gender when “scientific communication” was assessed.
- New classes/labs were developed - Environmental chemistry (Chem 6) and Energy and Sustainability Lab (EVST 5L)
- Successfully dealt with a problem of human resources (while the only tenured faculty was on sabbatical).
- Plan to continue offering virtual department meetings to save time, energy, money, and fuel.

Computer Studies (CS, CIS, CNT)

- Computer Center has pivoted its services to offer support in all modes (email, phone, Zoom, in-person) through extended hours and in the summer.
- Summer Cyber Campus 2022
- Implemented Hyflex training for CS course.
- Participate on the Guided Pathways student success team (CNT and CS)
- Using low/ no cost textbooks in 4 classes
- No computer required in CS courses; use tablet and Netlabs for CS and CNT
- Completed grant application for NSF/ S-STEM for low-income CS and Bio students; this was ultimately not funded but feedback will guide next submission.
- Curriculum developed for Robert Half Apprenticeships for CNT and CS students.
- LLNL Internships career event for CNT and CS students
- Initiated conversations regarding Amazon.com employee tuition program at LPC.
- Offer CS7 at Livermore High School and work with LHS on a definition of a Pathway to LPC
- First programs to participate in the REACH collaborative (Red Hat and MIS (CS))

Engineering (includes Engineering Technology program)

- Hired replacement full-time engineering faculty and discipline coordinator.
- Reorganized the common Physics and Engineering common lab spaces.
- Add two more part-time faculty in Fall 2022
- Faculty member trained in HyFlex mode of instruction.
- Hosted Vacuum Technology Workshop Summer 2022

Environmental Studies & Environmental Science

- Developed new classes and labs (Environmental Chemistry: Chem 6, EVST 5 Lab) and progressed with degree updates.
- Successfully ran a UC California Naturalist Certificate class through Community Education (class was full with a waitlist).
 - Updated Field Biology class to fit into the Certificate Program
- Faculty attended the UC California Naturalist Program Conference.

Geography:

- Geography is well-staffed, able to offer a robust number of classes each semester, and has several classes created with diversity of cultures and ideas as part of the curriculum.
- Hired an excellent replacement lab technician with shared responsibility for geology.
- There is a brand-new weather station that serves Geography and several other disciplines.
- It is a diversified, interdisciplinary program, serving not just STEM but also social sciences.
- All courses are approved for DE and Geography plans to continue using online tools.
 - This reflects feedback from students through informal surveys and enrollment trends that asynchronous courses are very popular.
 - More recently developed DE courses are showing higher success rates for students.
 - GEOG 1 will be redeveloped with new online pedagogy.
- Geography has met several of its goals for 21-22
- 100% of CSLOs were assessed - for 22-23 new ones may be created.
 - There were no patterns of inequity noted in the data.

Geology

- Hired two new part-time geology instructors as well as a new laboratory technician.
- Will offer a new course for the first time in Spring 2023, Geology 20, Earth Science for Educators
- Was able to resume teaching Geology 12 and 12L on campus while also offering it online so that students could choose their preferred modality.
- Held both in-person and Zoom office hours in order to reach out to more students.
- Used an online tool, Cappasity, to visualize three dimensional photographs of rocks and minerals.
- Evolved the Augmented Reality Sand Box in the laboratory for conducting instructor demonstrations on topography of features.
- Created various online references (such as still photos, videos, and written descriptions) for many of the minerals, rocks, fossils, and other resources in the teaching section.
- Implemented virtual field trips in online courses.

- Integrated online real-time assessments using Learning Catalytics during synchronous zoom classes, which enabled instructors to gain instant feedback on students' understanding of the course material. This allows instructors to focus class time on key concepts for which students need additional instruction in addition to improving overall student understanding of geological topics.

Horticulture

- Program met its program-set standard for completion.
- Program has a high successful completion rate of 89%
- Hosted groundbreaking for the new Horticulture facility
- Enrollment is the strongest it has been in several years.

Math

- Coordinated CoPs (communities of practice) for Math 30, 39, 40, 47 and Emporium to research OERI and free online homework platforms for students.
- Math 40 and 47 are now fully OER (Open Education Resources Initiative) and they anticipate Math 30 and 39 will soon follow.
- Partnered with Emerald Templeton in Academic Services to offer Math 40 to female inmates at FCI Dublin.
- Provided cohorted classes/learning communities for Math 30, 39, and 40 for Umoja, Puente, Engineering Tech and Veteran students.
- Pre-transfer level math course, Intermediate Algebra, has been kept active to serve Middle College students.
- Introduced HyFlex classes to give students more options including HyFlex option for all concurrent support and emporium courses.
- Continued to build supply of graphing calculators through IT and instructional equipment requests so that students can borrow them at no charge.
- Collaborated with Emerald Templeton to offer a new Geometry course for high school students (particularly Dublin HS) in summer 2022. LPC math faculty created the course outline, collaborated with high school districts on textbooks and worked to train CCC faculty to effectively engage with high school students.
- Offered Smart Shop workshops (mostly online) on topics such as Conquering Math Anxiety and Technology for Statistics.
- MathJam is back in-person for the first time since 2020.
- Math Emporium mode added Math 30, 39 and 47 to its course offerings due to AB 705/1705.
- Concurrent support courses are offered to support Math 1, 2, and 3.
- Collaborated with ECE to create a course outline and textbook for Math 27-Number Systems for Educators. It's being offered for Spring 2023 since it was canceled in Spring 2022 due to low enrollment.
- Math Guided Self Placement (GSP) depending on students' self-reported HS GPA & coursework now requires, recommends or informs students of the free concurrent and Math Jam support offered every Fall and Spring semesters.
- The department continued to be strongly represented among committee chairs, Academic Senate, and in leadership roles in campus initiatives such as Guided Pathways, UndocuAlly, Puente, and Umoja, as well as acting as club advisors for AGS, Math Club, Girls

Who Code, Dreamers Thriving Not Surviving, among others. Faculty volunteered their time to give talks to the Math Club and table at campus events.

Occupational Health and Safety (OSH)

- They were able to offer RAD 40 on-campus.
- Enrollments are strong in OSH classes and the program has the option to offer all classes in a DE modality.
- Due to the inclusion of multiple OSHA workshops within the OSH curriculum, students are able to achieve OSH training cards/certificates.
- There as implementation of a 2nd, high unit, Certificate of Achievement
- OSH/RADS courses have enrollments from a diverse cohort of students.
- OSH student success rates are 90%+
- OSH needs support on creating their first 3-year PSLO assessment plan.
- Working to determine how RADS CSLOs will be assessed.

Physics & Astronomy

- The program has been successful in hiring one replacement FT faculty, as well as new PT faculty and lab technician.
- The program was able to expand into 2 lab classrooms.
 - Working on a long-term goal to inventory and create a database for lab equipment.
- Physics/engineering/chemistry/biology/math coordinators have continued scheduling majors level classes together on a shared matrix to avoid scheduling conflicts.
- Purchased a new telescope that attaches to a digital screen through which galaxies and nebulae can be observed.
 - The digital screen addition creates accessibility for students with limited mobility or the ability to stand for long periods.
- The program has responded to changing social needs by offering more astronomy classes and more flexibility with concurrent enrollment with course prerequisites to support faster graduation times.
- Engaging in creative outreach and engagement strategies to increase astronomy class enrollments.
- Submitted a grant proposal to use the UC Lick Observatory
- Use information from students directly when planning course schedules.
- Considering moving to a standardized method of measuring scientific communication so that CSLO data can be more objectively assessed.

Viticulture

- Transitioning introductory classes to online format has been a success, and online classes have met enrollment capacity with a successful pass rate.
- Introductory VIT courses have been greatly successful and will likely remain so
- Campus Hill harvests completed (but need more student support)
- Facebook page continues to be successful and wine sales continue (lower sales due to less foot traffic)
- Diverse student population, including lifelong learners.
- Increase in female students in the program.
- Increase in older adults in the program.
- Increase in percentage of full-time students in the program.

Section B: Challenges and Needs

Overarching Themes: Challenges/Needs

Challenging and ongoing concerns in the STEM division include a need for additional staff, replacements for vacant positions, more lab space and equipment, and determining how and when to offer online modalities. Reassign time remains a critical need in multiple departments, as expressed in past program reviews. Increased reassign time is important because of the complexity of the programs. For example, nearly all programs have specialized classroom/lab/equipment needs, six programs have industry advisory boards, and some programs span CTE and non-CTE. In addition, several programs are also facility-intensive (agricultural sciences, lab sciences, computer center). The challenge is especially acute for math which must meet the mandates of AB 705 and AB 1705 while having vacant FT positions and reduced reassign time starting in 2023-24. Some programs have no coordinator, a PT coordinator, and/or no FT faculty. The OSH and Horticulture programs are coordinated by part-time faculty who contribute well beyond expectations. The Horticulture program is growing and must develop a plan for sustainable faculty leadership, e.g., in conjunction with viticulture and other college programs in an agricultural/hospitality pathway. Some programs are experiencing lower enrollments, reduction in FTEF, and class cancellations. Some disciplines are having trouble with their 3-year SLO planning and with strategies to recruit and engage PT faculty in decision-making and program work. There is a concern about the impact of a possible compressed calendar on lab classes and other high-unit classes. There are opportunity costs due to continued lack of bandwidth to respond to sustained high levels of demands for collaboration with community organizations and industry or to explore important areas of study, especially those that are interdisciplinary in nature (climate, sustainability). The labor market is tight for hiring in several areas, particularly biology, computer studies, engineering, and physics. This has led to significant turnover and continuous hiring, with negative impacts on evaluation demand, onboarding, and the division office.

Program Specific Notes (Alphabetically by program)

Biology

- Need additional Faculty for Biology: Allied Health Program courses (demand is higher than supply), part timers are either not qualified enough or choose other colleges (difficult to compete with other colleges).
 - Having the academic calendar sooner would help to plan and compete for part timers with other colleges.
 - Need a more streamlined procedure/forms for hiring emergency part timers would help too, the current process takes too much time and effort.
- Need more lab space, scheduling the labs is tough given the demand and number of classes needing labs.
- Need a designated coordinator/faculty lead for the new Environmental Studies program.
- Reassigned time is needed to update all lab manuals that desperately need review and reevaluation.
- Would like more professional development around equity issues and how these issues impact enrollment.
- Fear of shortened semesters - would be impossible to fit all the labs, especially given very limited lab space.
- Need a budget for fixing equipment.
- Need a digital library/check out system for supplies.
- Want an online component in in-person classes? Hybrid option?
- Student attendance is an issue in in-person classes.
- Need an improved onboarding process to hire new part-time faculty members.
- Would like to have the class schedule sooner so as to plan for hiring/staffing more efficiently.

Chemistry

- The department is in desperate need to replace old equipment that is failing and even can pose danger.
- The equipment also needs constant maintenance (extra hours and responsibilities).
- Lab space is limited and would pose a real problem if a shortened semester is implemented.
- Low enrollment, student attendance and study ethics are all issues related to pandemic (new demands, mental states etc.)
- Mask requirements are an issue, especially in the labs (coupled with goggles)
- Staffing difficulties (especially for in-person, hybrid courses)
- New and ongoing funding is needed to purchase new equipment.
- eLumen cannot disaggregate demographic data from courses outside of their AS degree so many students are not captured.

Computer Studies

- Existing CNT labs in Bldg. 800 have older equipment, which will be addressed in the move to Building 2100 in summer 2023.
 - Problems with overhead projectors in Building 800 during instruction

- At time of writing, department recognized the need for new printers; the old ones are 20-years-old

Engineering

- Low enrollment has reduced overall FTEF for already small department; has been increased for 2023-24 discipline plan.
- One-person department with only 1 CAH reassign time for the year; 14 degrees and certificates
- Challenging to balance time between Engineering and Engineering Technology programs
- The Engineering Technology program has an active advisory board.
- Need for contact information for all students who are declared as Engineering and Engineering Technology majors.
- Need for a way to track the number of students who successfully transfer to a 4-year university from LPC program.

Priorities

- Increase lagging enrollment.
- Create summer experiences for incoming students.
- Collaborate with new Civil Engineering program beginning at CSUEB; possibly create a transfer pathway.
- Hire more part-time instructors.
- Create a 3-year SLO assessment plan and work with part-time faculty to create SLO assessments.
- Revitalize Engineering Club

Environmental Studies & Environmental Science

- In need of reassigned time to work on degree programs, curriculum and equity initiatives.
- There is a success gap with Latino and African American students, need more data/surveys/time to find out why.
- Since it is a multidisciplinary program, there needs to be more coordination between faculty (lead faculty?), especially for SLOs.
 - Wish it would be possible to disaggregate the CSLO data across the programs that are part of this degree.
- Low enrollment has caused classes to be canceled.
- The program standard was not met but it is only based on one course, which had to rapidly switch to an online modality.
- There are no IR discipline data packets for Environment Science and Environmental Studies

Geology

- Lower than usual enrollment in on-campus classes and some online classes
- There is currently no full-time faculty member in geology. Coordination has transitioned to a part-time faculty member who is responsible for leading other part-time faculty and is assisted by the Dean.

Geography

- Geography is facing a significant enrollment decline, some of which began before the pandemic. Other courses meet the same requirements as Geography, the social science and STEM courses that help make up the geography discipline have declining enrolments, thereby impacting Geography.
 - Careful discipline planning is a high priority for this program - there will need to be a reduction in course sections, while also continuing to offer popular asynchronous modes of instruction.
 - Part-time pool is limited.
- This discipline has a shortage of some types of lab equipment and a lower supply budget than other programs. This is a continuing challenge. The department has not submitted any IER requests.
- Geography did not meet its program set standard, most likely due to the pandemic shift to online classes. They are working on revising online courses.
- The CSLO results were mixed, and the 3-year plan will need to be updated

Horticulture

- Low enrollment: summer session classes canceled.
- This program needs to reevaluate and redesign the noncredit Horticulture classes.
- This program needs to update their CSLO's as they have not been updated in 3 years, which is outside the 3-year assessment cycle.
- The program is missing a lot of detailed information to assess and review the program.

Math

- Reassigned time is not sufficient for the full scope of responsibilities assumed by the Department Coordinator.
- Critical FT faculty replacement is needed along with another on the way. One position has been vacant for several years and as of Spring 2023, they'll also lose Jason Morris. FT math faculty are currently overburdened with responsibilities from collegial, state mandates, department initiatives designed to aid our students.
- Declining enrollment has adversely impacted faculty and students in the past year. Factors that may include pandemic-related challenges, student barriers to entry, and negative effects of AB 705 are making it harder for students to find the appropriate classes especially when classes are canceled due to low enrollment.
- Courses' textbook & educational material cost warrants consideration of piloting OER instead of currently assigned textbooks which require students to pay for access to educational materials. Researching, planning, and devising OER for math classes is a slow and time-consuming process. Reassign time for departmental OER coordination and development would make the process more cohesive and improve quality.

- Responses to AB 705/1705 included adding more transfer level courses to Emporium mode and adding the requirement of concurrent support or Math Jam for the lowest GPA band. Both of these special forms of instruction could use support in the form of more reassign-time for faculty to coordinate those efforts along with instructional assistant support.
- Concurrent Support and Math Jam face similar coordination issues. There are no instructional assistants dedicated to help facilitate running of the Blueprint Canvas courses, coordination of PT faculty, and collaboration with faculty coordinators would increase the quality of courses and allow current faculty coordinators to focus their energy elsewhere to improve the course contents. Additional resources and staffing is essential.
- PT faculty involvement with the department continues to be minimal.
- Classroom availability and lab space is a significant obstacle when planning a schedule to offer classes at peak enrollment times. More HyFlex classrooms or better planning by departments to align course type with room type would make this easier.
- AB 705/1705 legislation resulted in Math Dept. choosing not to offer any courses below transfer-level math (exception: Math 55 for Middle College). Due to this, they are requiring Math Jam or concurrent support courses for the lowest band of HS coursework or GPA. Our current Guided Self-Placement (GSP) interface's limited message along with lack of consistent information in CLASS-WEB created registration issues for students. The GSP and ClassWEB need some serious revisions to help remove this barrier to entry in their math class.
- Math offers classes in multiple modes of instruction: Asynchronous online, Synchronous (in-person/HyFlex), and Emporium. Even with all the information provided on the math department's webpage, emails to students, communications to counselors, many students are choosing poorly. Students are signing up incorrectly for a mode that does not fit their learning style. They either try to tough it out or drop out and lose a semester since they cannot join the appropriate mode/section if that section is full.
- Regarding ideas to help remove inequities, work on doing more "just-in-time" remediation to help students who may not been as well prepared before joining class.
- Free graphing calculator loaner program supplies have diminished due to calculators not being returned or broken due to repeated use. Challenges of replenishing supply when Math Department wants to claim Zero Cost for sections.
- Lack of technology (ie., owl capabilities on breakout tables so students can collaborate online with in-person students and wireless microphone headsets for instructors) makes the HyFlex sections inequitable for all students.
- Need for call campaign to follow up with students who withdrew or did not pass a math course.
- Community of Practices was funded by SCFF Project but is now ended. This was open to all FT and PT math faculty to engage in equity driven initiatives to improve first transfer-level math courses.
- SmartShop Math workshops are more about cognitive skills rather than about math skills.
- With the implementation of AB 705, current trend packets are no longer useful to look at evaluating success rates from Math 107/65/55/50 to college level courses. Cannot evaluate the success rates until the end of Spring 2023 when they have 2 full semesters of consistent requirements.

- Need to look into why there is a greater dip in the percentage of female students who decide to enroll in Math 2 versus male students.
- From the SLO performance by gender, want to examine the gender gap for Calculus.

Occupational Health and Safety (OSH)

- Past time coordinator receives no reassign time yet has responsibility for industry advisory board and important connection to the OSHA program at the district.
- The program lost ½ of it's adjunct faculty members
- There is a need to create a pipeline for future students entering the OSH program.
- There is a need to develop and implement a lab component into OSH/RAD classes and internship opportunities.
- It's been a challenge to entice students to take on-campus classes; working on a new plan to determine how to address this.
- Need to maintain enrollment levels in RADS classes and increase enrollment in RADS 40A class.
- Need to revitalize their advisory board.
- Need to establish course equivalencies between OSH/RADS classes and ASHA Training Institute courses as a long-term goal.
- Math skills need to be supported in some students who drop courses because of this.
 - The recommended Math class is no longer being offered but they are collaborating with MATH for ways to meet their student's needs.
- There was a significant drop in female enrollment in OSH between Spring 18-22

Viticulture

- Frustration with where the new facility will be located and the timeline for construction (is now last in line)
 - Pandemic impacted student morale, diminished face-to-face classes, and processes like curriculum and addendums.
 - Budget remains insufficient.
 - Initially, more lab tech support was identified as a need; as of January 18, 2023, a new 50% FTE, 12 month has been hired to address this urgent need
 - Low foot traffic on campus = lower wine sales
 - Lack of student support during Harvest season
 - Vineyard management has proven to be a challenge.
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Section C: Priorities and Recommendations

I. List of Universal needs/priorities - identified by all or most Programs in the Division

A. Quick fix (Can be done now or soon; may take little/no extra resources)

1. More effective use of dialogue and collaboration tools

a) Professional Development on the MS Office Suite

B. Interim (more work required but can be done within the academic year)

1. Developing Student Success team processes, tools, and goals

2. Increase the awareness of resources for all faculty and Classified Professionals

3. Continue to engage with SLO support, more analysis and sharing out of eLumen data for each semester, and professional development.

4. Increase engagement with PT faculty, who are often working at multiple sites and have limited time.

C. Structural process (longer-term work to be done to "resolve")

1. Reassign time must reflect the work asked of Coordinators.

2. Resources need to be dedicated to fill vacant positions and new needed FT positions.

3. The hiring/evaluation process is highly labor-intensive for coordinators and the Division office and could be streamlined or centralized.

4. Supporting/encouraging programs to apply for instructional equipment and find resources to support teaching and learning.

5. Increase Classified Positions to support Academic Services

6. Building bandwidth to meet high levels of requests for collaboration from outside

7. Engage fully in discussions around the compressed or alternative calendar

II. List of Program needs - identified by only one or a few Programs, but still needs consideration.

A. Quick fix (Can be done now or soon; may take little/no extra resources)

1. Develop deadline for new faculty hires for the following semester to reduce workload on Division office and hiring and onboarding processes; will need to consider impact on enrollment.

B. Interim (more work required but can be done within the academic year)

1. Encourage and support programs to use the RAC process to apply for IER.

2. Encourage and support disciplines through the FHPC and RAC process for vacant and new positions (Geology, CIS, Math, Biology)

3. Hire to fill FT faculty as per FHPC process and Presidential approval: e.g., Geology, CIS, and Bio/Allied Health positions.

C. Structural process (longer-term work to be done; research and investigation required to "resolve")

1. Create and hire a Viticulture Winery Manager position.

2. Develop a sustainable way to run the VWT Foundation and develop a business plan.

3. Better reassign time for Horticulture and OSH who currently have only PT faculty, one of whom serves as coordinator.

4. Develop sustainable faculty leadership and succession in agriculture sciences, with connection to hospitality industry and internal partners (e.g., nutrition and sustainability)

5. Sustain work and innovation in Math to address AB705, AB1705, and raise awareness of widespread impact on college programs and services.

6. Replace vacant FT positions in Math (2)