Sample Program Reviews

Administrative, Business Services, CTSS, Facilities, Custodial and Ground

MATH

Philosophy

Physics

Student Life

All Fields

Administrative Comprehensive Program Review: Business Service/Facilities/Custodial/Grounds/CTSS

Cover

Program Review Year

Division
Administration

Department
Administrative Services

Subject

- ASVPOBS ASVP Office/Business Svcs
- CTSS Campus Technology Support and Services
- FOCG Facilities, Operations, Custodial and Grounds

Overview
Title Business Service/Facilities/Custodial/Grounds/CTSS

Year of Last Administrative Unit Review Fall 2020

Originator Alexander, Andrea

Area Manager Andrea Alexander

Co-Contributors

*Co-Contributor must be chosen before proposal is launched

Department Overview

- **1. Please describe the functions of your department. Feel free to use a bulleted list for ease of reading.**

  - Business Office - Budget and all fiscal matters regarding the college and fiscal management and compliance

    - Business Services functions to support Instruction and Student Services by promoting a better understanding of the colleges' business operations.
    - Our focus is to uphold the highest standard of excellence in the performance of our responsibilities through the use of sound, effective and efficient business practices that comply with state statutes, board polices and administrative procedures.
    - Business Services goal is to clearly communicate, disseminate and effectively present financial information and support services to the college community in a way that promotes consistency, understanding, trust and transparency.

  - CTSS - Local technology to include systems, network, hardware, and software of the college

  - Facilities operations to include AED, ADA, Safety/Facilities, Maintenance

- Facility Access
- Auxiliary Services
- Campus Safety
- Bond Projects
- Furniture, Fixture & Equipment

- Grounds and Custodial - All activities regarding the external and internal cleaning and safety maintenance of the campus buildings and grounds.

Grounds

-Oversee campus grounds and deploy the limited grounds crew in the most efficient manner, with the goal of maintaining a clean environment for students, faculty and staff in order to foster an environment conducive to the pursuit of learning.

Grounds are responsible for the external beautification and safety of the campus. Such activities include:

- *Landscaping (trees, lawns, plants, etc.)*
- *Parking Lots/Side walks*
- *Athletics Fields (Soccer, Tennis, Pickleball, Basketball, etc.)*
- *Irrigation/Sprinklers*
- *Pest control*

Custodial

Work with College Facilities on set-ups for internal and external events. Responsible for all unlocks of classrooms during the Fall, Intersession, Spring and Summer courses. Such set-up includes:

- *Tables*
- *Chairs*
- *Canopies*
- *Indoor garbage cans*

Assist department department's manager and staff when office move is needed. By doing so, the team is in support of the restructure of the office, department, or college to align with the needs of the students.

2. Describe current department staffing including whether they are filled or vacant.

Classified Full Time

 # Assigned to the Department

36

 # Actually Staffed

33

Classified Part Time Permanent

 # Assigned to the Department

0

 # Actually Staffed

0

Classified Part Time Hourly

 # Assigned to the Department

2

 # Actually Staffed

2

Administrators

 # Assigned to the Department

7

 # Actually Staffed

4

Other (please specify)

 # Assigned to the Department

0

 # Actually Staffed

0

- **3. List department goals. For all follow-up Program Reviews, please provide an update on the department's progress on achieving its department goals set during the last program review cycle.**

Business Office

- It is our commitment to provide quality services to our students and staff in a responsive and effective manner, which contributes to a work environment that promotes teaching and learning. Such as availing the option to wire payments to students' bank accounts disbursed from the Associated Student Body due to remote learning, availing the budgets for unexpected events such as, anyone going on maternity leave, extended sick leave, family emergency or repairs of dish washer in the labs, breakdown of one of machine in lab that cannot wait due to class disruption.
- Providing continuous training to all new employees so that the deliverables are smoothly processed. Business Services-host quarterly training on how to complete budget transfers, how to process payments to vendors so that the services are not disrupted due to non-payment, how to reimburse all employees who went out of pocket while buying goods and services for our students, how to complete a board of election to hire seasonal employees and making sure they are paid on time as most of the part time seasonal employees are our own students.
- Last year Business Services hosted a training on employee reimbursements and travel. We got positive feedback from the attendees, and in addition, we got the topics the audience wanted Business Services to do next time.
- Business Service's one of the goal is to approve requisitions submitted by all departments for purchase and payment of goods and services. Department works extremely hard in providing the services to the students, achieving the student equity gap, and increase enrollment. For example, Perkins is one of the restricted grant where the goal is to spend down this grant by June 30. Business Services work together to ensure funds are utilized within the allowable criteria under each approved projects, and complete the quarterly reporting on time so that the future funding is not at risk.
- Department received one-time funding for example, High Road grant which had a strict deadline to spend with a use it or loss it option. The turnaround time was so critical, Business Services work very closely with the Business and Workforce department to ensure we are in compliance with all purchasing protocols, and yet meet the deadline of utilizing the funds fully in the best interest of our students.

Grounds/Custodial

- *To better focus on tree work as time permits. By doing so, the team are able to be proactive on the tree work and reduce the number of broken branches and minimize the safety risk.*
- *To create a list of projects/work and when it should be completed (daily, weekly, monthly, seasonal, etc.) to better assist management on understanding the workload.*
- *To create a list of projects/work and when it should be completed (daily, weekly, monthly, seasonal, etc.) to better assist management on understanding the workload.*

Facilities/Operations:

- Goal 1- Staff, Faculty, Students and clients will be set up with available campus resources so that they can have a successful event and/or experience.
    - Since the last program review, the Facilities Department has successfully met the resource needs for staff, faculty and students which helped ensure a successful event/experience. Survey responses and follow-up meetings lead to collecting feedback on what went well and areas of opportunity. Successful events help create space for students to build community and connect with other campus resources.

- Goal 2- Staff, Faculty and Students will have access to furniture, fixtures and equipment (FFE) to support a successful college environment.
    - The Facilities Department has completed various FFE projects to help meet the needs of our campus. An example is the recent purchase and installation of wellness stations for each of EVC's Buildings. In each building lobby, Facilities installed a wellness station that distributes hand sanitizer and face coverings for students, staff and guests. The installations of these wellness stations help create a welcoming and safe space by offering items that provide safety while on campus.

CTSS:

- Respond to all help desk requests within 24 hours and solve all immediate needs within 48 hours.

- Resolve all long terms needs asap or within a week - to two week timeframe

- Per help desk measures CTSS answers over 250 a week and resolves 95% of them within 24 hours. The remaining 5% are larger issues that are resolved through planning, bond management, and District aid within a month's period.

- **4. If you received resource allocation for your last program review cycle, please indicate the resources you received and how these resources were utilized to impact student success and / or improve unit services. (The resources can be personnel or fiscal).**

Business Services

Business Services did not receive any resource allocation last year but got rollover monies from the Fund 10. All were used for custodial products for the campus, all CTSS monies for hardware and software needs of the college. All business office monies were for supplies for the running of the fiscal services. All operational/facilities monies were for fleet management, AEDs, ADA compliance, CPR training, and all other repairs to facilities around campus.

Custodial

Supplies	$33,844.94
Other Operating Exp.	$33,732.18

Grounds

Supplies	*$57,967.00*
Other Operating Exp.	*$12,159.65*

The budget that the department received this year will go toward their standards purchase for supplies and also the contract for pest control and minor equipment replacements.

- **5. Please state any recent accomplishments for your department; making sure to connect each accomplishment to the College's mission and strategic goals.**

Business Services:

- successfully distributed around 450 students with Visa Cards, who were financially affected due to COVID. Our goal is to help students to allow them to complete their education to

transfer to 4-year College.

- Business Services manually went in each 315 students account in respective terms to write off their outstanding balances while being compliance of all education codes , using the one-time funding allotted by Federal. The goal is to achieve student equity gap, increase successful enrollment, and increase transfer to 4-year institution.
- Our College was allotted with a lot of one-time funding such as HEERF, mental health, Basic Needs, UCSD Space grant, NSF Goals and Includes, Outreach Retention, Cal Fresh etc., all these grants needs to be spend on time if not the funding would be taken away. Business Services worked very closely with respective departments to ensure the funds once allotted to each department are spent within the approved plan and within the best business practice. Such creation of the GL accounts, transfer of budgets, establishment of all contracts and payment of goods and services.

Grounds/Custoidal:

- *An example of this would be when Grounds participated in Bond meeting and communicate with the Bonds team that for any new project, the sprinklers brand should be Rain Bird. By having one brand for the entire college, it allows Grounds to reduce their inventory and narrow it down to one brand, which makes it easier when it comes to repairs. By doing so, it assist with reducing the amount of inventory that we carry with other brands and assist with budgetary management.*
- *In coloration with Campus Police, the team went through a new key system. The new system allows for all keys to be kept in a lock block that would manage when the key are being used and by which employee. This allows for a better internal control of who have access to the campus keys and when it was checkout and returned.*
- *The team also transition to a new routes rotation. The goal is to rotate the routes every two years. By doing so, it allows each member of the team to get familiar with the entire college and how cleaning should be done for certain areas. By having staff familiar with the entire campus, it allows for better support when staff are pull off their runs to help cover another area due to staffing shortage.*

Facilities/ Operations:

- The Facilities Department successfully completed the purchase and installation of new glass boards in the Acacia & Sequoia building. Instructors in Nursing and Math, Science & Engineering (MSE), expressed the need for new glass boards. The Facilities Department accessed, researched, advocated and lead the installation project for new glass boards. The installation of new glass boards has helped improve instructors' ability to provide visual presentations for students and help students who are visual learners.
- The Facilities Department completed the purchase and installation of new Lab Chairs for the Acacia and Sequoia building. The lab chairs in the Acacia and Sequoia buildings had reached their use life, and facilities supported the selection and installation of new lab chairs. By providing new lab chairs, students and faculty have functioning and safe lab chairs for their lab classrooms.
- Over the last 3 years, the Facilities Department has implemented various safety measures in a emergency response to the global pandemic. Emergency responses vary (SARS, MERS, Fires, Earthquakes, Flooding, etc.), but COVID required a lot of time, resources and work. In effort to help ensure a safe return for students and staff, Facilites installed COVID signage, social distancing barriers, wellness stations, COVID Testing, hand sanitizer and sanitizer wipe dispensers in each classroom. This helped students and staff feel safe because there were various safety measures in place.

- After 2 years without a traditional in-person graduation, EVC hosted an in-person graduation in May 2022. Facilities help support the pre, during and post logistics and set-up. Graduates and their families celebrated at the end of graduation.
- Student Loaner Laptop program
- Fleet Management program
- AED program

CTSS:

Received a rolling allocation based on software, hardware, insurance, and infrastructure needs to continue purchasing CANVAS. Ellucian, Konica printing and all other software district mandated packages.

Service Area (Department) Effectiveness

Service Area Outcomes

- **List the department Service Area Outcomes. (See the supplemental guide to SAOs for information on how to create a SAO; your department should have 2 to 3 SAOs and at least one must be process outcome).**

Business Office

- Business Services host quarterly training. There is huge participation and positive feedback from the attendees. According to the survey, there is high demand for other topics to be covered, which Business Services work hard to accommodate.
- Business Services always adhere best business practice and contribute to the achievement of institutional goals and College mission. Some of the key functions and outcomes are:

Services	Outcome
Process Budget Alignment	Within 2 days, budgets are avail for department to use.
Student account financial issues	Within 2 days Business Services, help to trouble shoot the students accounts if not, refer to correct department for further help.
Process Petty Cash	Within 2 days, Business Services process Petty Cash and have the funds available for staffs to pick up.

Payroll Check Distribution	Upon receipt of the checks from District Payroll office, same day Business Services inform all the employees to pick up their payroll checks.
Associated Student Body(ASB)	Within first week upon receipt of bank statement, Business Services reconcile ASB bank account and submit to district.
Clean Audit	EVC's financial statements are so far free from material misstatements.

Grounds/Custodial:

1. Beautification of the campus to continue to attracts new students through multiple means of outreach and by community awareness. Such beautification includes, tree trimming, lawn mowing, cleaning of the parking lot and emptying outdoors trash cans.
2. Providing a safe, nice, clean, and welcoming campus to the current faculty, student and staff to support student retentions and also increase faculty and staffs retention. Such activities include trimming of overgrown trees or removing of dead/broken tree branches. Along with mowing and clearing of any external debrief so that student, faculty and staff does not trip and fall.
3. Cleaning of the external sport facilities such as: Tennis Courts, Pickleball Courts, Futsal, Soccer, etc. By providing a clean sport facilities, the team is ensuring that the space is safe for class to be held. Along with classes, it also provide the student athlete a place for them to come together and build their team building skills.
4. Grounds are responsible for repairing and replacing broken irrigation lines and sprinklers. By doing so, they are minimizing the amount of water wasted. This action goes toward achieving the standards that are set by South Bay Water and the State of California due to the drought.
5. *Clean and maintain all internal spaces within buildings, floors, floor coverings, restrooms, windows, white boards/chalk boards, counters, ledges, tops of desks, chairs, and tables.*
6. *Report to Maintenance department all light lamp outages, broken doors and locks, plumbing problems, electrical problems, and problems with alarms.*
7. *Work with College Facilities on set-ups for internal and external events. Responsible for all unlocks of classrooms during the Fall, Intersession, Spring and Summer courses.*

Faciliies/Operations:

Facilities supports EVC's Educational Master Plan by creating campus for students/staff that is: Safe, provides appropriate facilities for programming, relevant resources, equipment & furniture. Facilities works behind the scenes to support programs & departments to reach the goals of shortening students' time and eliminate the equity gap at EVC.

- Build a network of potential renters by connecting with local community organizations.
- Ensure that programs & department are able to access facilities that meet their needs.
- Provide safe & relevant classrooms that meet the needs of the students and instructors.
- Provide departments/programs with facilities and set-up that meet the need needs of their event.

- Ensure that construction projects meet the needs of students/staff, while ensure projects do not disrupt campus.
- Provide auxiliary resources that help students succeed.
- Provide a campus that is safe & prepared for emergencies.
- Ensure that furniture, fixtures and equipment needs are met for the campus.
- Ensure that departments have access to clean and safe vehicles.

CTSS:

Increase the response time to resolve issues as they come from the campus to the help desk

Ensure the campus network system is better protected from cybersecurity or phishing concerns

- **Since your last program review, summarize SAO assessment activities and results. Please include dialogue regarding SAO assessment results with division/deparment/college colleagues and/or GE areas. Provide evidence of the dialogue (i.e. department meeting minutes or division meeting minutes...)**

Business Office:

Assessment Activities Functions	College Goal/Current Priorities
Processing request for requisitions	Approve and submit requisitions to District within 72 hours of receipt in Business Office
Cash Management	Deposit all checks within 48 hours of receipts
Budget Management	• Hold monthly meetings with budget managers/college administrators to review monthly Budget vs. Actual results to avoid deficits by fund. • Distribute monthly reports and recommendations to budget managers or College Administrators for each cost center and for each fund. • Process BTs within 48 hours and request for Budget analysis within 3- 5 days of request.
PAF Processing	• Approval of PAF processing in Business Office within 5 days of receipt.

Grounds/Custodial:

- Grounds responds time with work order received are completed within 24 hours. If the work order cannot be completed within 24 hours, communication from the department or manger is

done to the requestor to acknowledge the work order and also to let them know why it cannot be completed within 24 hours. Along with that, continues communication to the requestor and provide the requestor with status update as needed.

- *Custodial responds time with work order received are completed within 24 hours. If the work order cannot be completed within 24 hours, communication from the department or manger is done to the requestor to acknowledge the work order and also to let them know why it cannot be completed within 24 hours. An example of a work order that cannot be completed in 24 hours are orders that have to do with floor or carpet deep cleaning. Such cleaning is schedule to do during the downtime of the campus. Communication from the manger/supervisor will be done to the requester and will let them know that it will be added to the cleaning schedule. Another example have to do with the assist of the office move. The majority of the time, when a request is made, the Lead Custodian would walk with the Facilities Coordinator to identify the items that needs to be move. By completing a walkthrough before the move, it allows for clear communication and the team knows exactly what they are removing.*

Facilities/Operations:

Facilities has supported EVC's access to facilities. Facility access includes External Rentals, Internal Events, Classroom Scheduling, Event Set-up/Logistics. SAO assessments results for facility access are driven by completion

Through facility rentals, we can help eliminate equity gaps by humanizing our campus for potential students, staff, faculty and partnerships with surrounding organizations who rent our facilities. There are various organizations that use our Facilites through various partnerships. ACCEL Middle College is a program that uses our facilities to offer classes on our campus for Yerba Buena High School students. By having this partnership, we are creating a pipeline for students to enroll into EVC after high school completion.

Internal Events allows students and staff to utilize EVC's facilities to provide campus programming, events and training. Through internal events, Facilities can help shorten students' time and eliminate equity gaps. Examples of this include:

- Campus programming such as 2nd Harvest Food Bank & EVC Fresh Days. Facilities provide set-up support, tables, canopies and supplies. The 2nd Harvest Food Bank and EVC Fresh days help to eliminate the equity gap by providing accessible food for our students and surrounding community.
- Campus events such as Heritage Month Celebrations. Facilities provide set-up support, facilities, tables, and canopies. Heritage Month celebration events such as Lunar New Year Celebration & Filipina/o/x American History Month Celebration help to shorten students time and eliminate the equity gap because it creates a space for students connect, recognized and celebrated.
- Training. EVC hosts Professional Development Days (PDD), which is a 2-day development day that happens in the Fall and Spring. Facilities support the scheduling of rooms and set-up of the training. Training such as PDD help align staff with the Districts & College initiatives by providing training on relevant topics to help shorten students' time and eliminate the equity gap.
- Graduation and Nursing Graduation. Facilities support the set-up and execution of EVC's Graduation and Nursing Graduation. By supporting these events, Facilities helps to ensure students and their families can celebrate all the hard work students have put into their education journey. Graduation allows students to be recognized and celebrated by the EVC community.

Classroom scheduling is supported by facilities, which allows departments to schedule instructional space and appropriate rooms based on capacity and room type. This is important because it helps to support the accessibility of all curriculum and technology across the campus, which helps close the equity gap and shortens student's time. For example, when MSE utilizes a lab classroom, facilities make sure that departments know what labs are available, room capacity and what technology is available, so that instructors have the tools to deliver their curriculum.

EVC has various Bond Projects taking place that are driven by the Education Master Plan. The Facilites Department reviews the design and programming of all construction projects and provides feedback to ensure the space is equitable and meet the needs of students and staff. During

construction, facilities provide Campus Logistics/Planning, so that programing is not impacted. This ensures that construction does not disrupt programs and departments as they work towards the Education Master Plan.

The Facilites Department partners with Auxiliary Services. Auxiliary Services help enhance the student's experience to help ensure students' needs are met. Auxiliary Servies at EVC include Follet Bookstore, MeFit and Fresh & Natural.

- Facilities support the partnership with Follet Bookstore. Follet Bookstore provides materials needed for instruction and campus programming. This helps ensure that students have access to resources to help them succeed. Through collaboration, facilities can help ensure Follet Bookstore is able to support and align with EVC's Education Master Plan by providing resources to help shorten students time and eliminate the equity gap at EVC.
- Facilities support the partnership with MeFit. MeFit provides affordable healthy food & beverage vending machines. This helps ensure that students have easy access to food on campus. Through collaboration, facilities can help ensure MeFit is able to support and align with EVC's Education Master Plan by providing resources to help shorten students time and eliminate the equity gap. This helps keep students on campus vs leaving campus, which has an impact on student success.
- Facilities support the partnership with Fresh & Natural. Fresh & Natural provides affordable cafeteria food options for EVC Students/Staff. This ensures that students have easy access to culturally diverse food on campus. Through collaboration, facilities ensures that Fresh & Natural can support and align with EVC's Education Master Plan by providing resources to help shorten students time and eliminate the equity gap. This helps keep students on campus vs leaving campus, which has an impact on student success.

Tha Facilities Department works to ensure EVC is a safe and welcoming campus. Campus Safety is done through various meetings and work which includes Emergency Preparedness Team and Safety and Facilities.

- Emergency Preparedness. Facilities support the Chief of Police with campus emergency preparedness. As departments and staff work to support in executing the Education Master Plan, Facilities ensures that the campus is prepared to respond to emergency situations by keeping staff/students safe and responding to injuries.
- Safety & Facilities Committee (SFC)- Facilities lead and participate in EVC's SFC. SFC reviews and makes recommendations on bond projects to ensure the Facilities Master plan is in line with the Education Master Plan. The committee also review and makes recommendations on safety/facilities issues that impact EVC's campus at large. This helps to ensure programs/departments have appreciate facilities that are safe and help to meet goals identified in the Education Master Plan.

Facilities ensure campus has the furniture, fixtures & equipment (FFE) to ensure students success and to meet the needs of the students and staff. By providing students and staff with the appropriate FFE supports programs and departments in shortening students' time and eliminating equity gaps in goal achievement.

- Example - Instructors shared that new glassboards were needed in the Acacia building because it was limiting them to write visibly on the board. Facilities reviewed and provided recommendation to replace. Facilities supported the contract, purchasing, planning and installation of new glassboards throughout the Acacia building.
- Facilities also support district approved work accommodations. Employees submit work accommodations to Human Resources, which are reviewed and accessed by HR. With HR recommendations, Facilities develops a plan to meet the recommendations provided.

CTSS:

Worked with the district to design and implement MFA that allows for further security measures to log onto system

facilitated workshops on MFA and how to better protect your equipment from phishing, fraud, and cybersecruity

Provided ongoing loaner laptop program for 3 years during COVID and currently for all those campus community members that needed to maintain access.

- **What plans for improvement or changes have been implemented to your program as a result of SAO assessment? Please share one or two success stories about the impacts of SAO assessment on student learning.**

Business Office:

- Concur is the new software our college started to use. Business Services work very closely with all employees to ensure they are paid timely for their out of pocket cost.
- Grants such as High Road and NSF Includes have a strict deadline to spend down, if not our college will lost the funds. Despite the change in management at the department, Business Services worked very closely with the Business and Workforce department to make sure they are on the target, and within compliance of best business practice and eventually met the deadlines.
- Expend on training and availing the resources timely to all the staff with 508 compliance.
- Business Services Supervisor inherited various task from District such as, creation of GL accounts, posting of Budget transfers, updating of analytic, reconciling balance sheet accounts, and working closely with the state chancellor’s office on aligning the budgets. One of the plan for improvement is to upgrade the range of Business Supervisor position.
- Another plan is to upgrade the Accounting Technician position as a Business Services Coordinator.

Grounds/Custodial:

- Currently, Grounds work order are submitted in a form of an email to the manager. From there, the manager/supervisor would communicate the work order with the team. Going forward at the beginning of January 2023, the Grounds’ work order will be submitted through Team Dynamix. By transitioning the team work order to Team Dynamix, it allows for a better tracking system of how many work order the department received. Along with that, the team can communicate directly with the requestor and not having to go back and forth with the manager/supervisor being the middle person. It also allows, the staff member to comment on the work order ticket.

- *Currently, Custodial work order are submitted in a form of an email to the manager. From there, the manager/supervisor would communicate the work order with the team. Going forward at the beginning of January 2023, the Custodian's work order will be submitted through Team Dynamix. By transitioning the team work order to Team Dynamix, it allows for a better tracking system of how many work order the department received. This allows for the manager to assign the work order to the staff. From there have the staff be accountable for the work order and communicate back to the manager when the work order is completed. If the work order cannot be completed, the staff member will also let the manager know why*

Facilities/Operations:

The Facilities Department has learned that there is a lot of behind-the-scenes work that takes place that impacts student learning. The Facilities Department will be adding a few more goals to highlight how the Facilities Departments helps support students' learning. Examples are highlighted in the narratives above.

CTSS:

Increase cybersecurity as well as work with departments to combine software and hardware packages for economics of scale. This will allow more discretionary money to be available for the college.

Budget Planning

Part E: Budget Planning

- **1. List any changes to budget since the last program review.**

The majority of the changes to the department budget were the growth in the salaries and benefits. This is due to the increase in COLA along with any staff's step/column increase.

in addtion there is a 15% increase in all CTSS supplies and equipment to include hardware and software components. This also includes an increase in printing, CANVAS, Elluciian functions, Adobe, and all other communication platforms the college has to pay.

Supplies and equipment for Custodial and Grounds supplies have gone up 7% based on supply chain demands.

Technology and Equipment

- **1. List any changes to technology of equipment since the last program review.**

Facilities/Operations/CTSS

- Use of esignature software
- Use of online meeting formats
- Use of staff laptops to participate in online meeting

Grounds/Custodial:

- *Since the last program review, each of the Grounds staff received an iPad. The iPad are given to each Grounds member with a specific program installed to the tablet so that Grounds are able to pull up campus blue print when they are out on site or in meetings with the Bond team and the contractor.*
- *Since the last program review, the custodial dept. purchased new cleaning equipment such as vacuums, fog sprayer to assist with the cleaning during the pandemic and light weight blowers.*

CTSS:

More software equipment needed for graphic class and engineering class bought by CTSS

Service Area Outcomes and Assessment

Related Assessments

Additional Information

- **Please provide any other pertinent information about the program that these questions did not give you an opportunity to address.**

The Administrative Services area will have a new (3 story) building coming online in Fall 2023. The need for additional technology equipment, a new Custodian to clean the building, and additional resources for it is large and expanding the landscape of the campus.

In addition, EVC has over 20 new grants that are coming through the office and the need for better operation manuals and software to handle these new grants for the Business office are needed if the grants (Fund 17) are to be accepted going forward.

Future Needs and Resource Allocation Request

Based on the areas noted below, please indicate any unmet needs for the program to maintain or build over the next Comprehensive Review. Please provide rationale on how the request connects back to SAO assessment, strategic initiatives or student success. If no additional requests are needed in any of the areas, put N/A.

1. **Equipment/Supplies**

   Ongoing Budget Needs
   Custodial - Toilet Paper, Cleaning Supplies, Cleaning Equipment, New Building- $200,000

   One-Time Expenditure

   Request linked to SAO #

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

2. **Equipment/Supplies**

   Ongoing Budget Needs
   Grounds - Safety supplies, exterminator - $200,000

   One-Time Expenditure

   Request linked to SAO #

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

3. **Equipment/Supplies**

   Ongoing Budget Needs
   Business Office - Supplies, software, 27 new grants - $20,000

   One-Time Expenditure

   Request linked to SAO #

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

4. **Technology**

   Ongoing Budget Needs
   CTSS - Software and Hardware, Printer and Paper for campuswide (new building LA) - $80,000

   One-Time Expenditure

   Request linked to SAO #

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

5. **Equipment/Supplies**

   Ongoing Budget Needs
   Facilities/Operations - ADA, AED, Fleet Management - $100,000,

   One-Time Expenditure

   Request linked to SAO #

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

Improving student success rates
Yes

Achievement of program set standard for student success
Yes

6. **Classified Professional Request**

Ongoing Budget Needs
Custodian - opening of LA Building to include 3 floors

One-Time Expenditure

Total Expenses (Staffing and Faculty Requests include Salary and Benefits)
135000.000

Request linked to SAO #

Strategic Initiatives (student centered, organizational transformation, community engagement)
Yes

Improving student success rates
Yes

Achievement of program set standard for student success
Yes

Total Cost
Equipment/Supplies
Ongoing Budget Needs: Custodial - Toilet Paper, Cleaning Supplies, Cleaning Equipment, New Building- $200,000
One-Time Expenditure:
Total Expenses (Staffing and Faculty Requests include Salary and Benefits):
Equipment/Supplies
Ongoing Budget Needs: Grounds - Safety supplies, exterminator - $200,000
One-Time Expenditure:
Total Expenses (Staffing and Faculty Requests include Salary and Benefits):
Equipment/Supplies
Ongoing Budget Needs: Business Office - Supplies, software, 27 new grants - $20,000
One-Time Expenditure:
Total Expenses (Staffing and Faculty Requests include Salary and Benefits):
Technology
Ongoing Budget Needs: CTSS - Software and Hardware, Printer and Paper for campuswide (new building LA) - $80,000
One-Time Expenditure:
Total Expenses (Staffing and Faculty Requests include Salary and Benefits):
Equipment/Supplies
Ongoing Budget Needs: Facilities/Operations - ADA, AED, Fleet Management - $100,000,
One-Time Expenditure:
Total Expenses (Staffing and Faculty Requests include Salary and Benefits):
Classified Professional Request
Ongoing Budget Needs: Custodian - opening of LA Building to include 3 floors
One-Time Expenditure:
Total Expenses (Staffing and Faculty Requests include Salary and Benefits): 135000.000

Attach Files

Attached File

IEC Reviewers

IEC Mentor
Antoinette Herrera

IEC Second Reader
Fahmida Fakhruddin

All Fields

Instructional Comprehensive Program Review: Math Program Review 2021

Cover

Overview
Title Math Program Review 2021

Year of Last Comprehensive Review

Year of Last Mini Update, if applicable

Originator Erickson, Shanna

Area Dean Antoinette Herrera

Division
Math, Sci. & Engineering

Department
Mathematics

Subject

- MATH - Mathematics

Is this a review for a degree/certificate or all the courses in the subject?
All Courses

Courses with no Degree or Certification

Co-Contributors

*Co-Contributor must be chosen before proposal is launched

- Anderson, Sylvia
- Burnham, Cynthia
- Cong-Huyen, Laimi
- Herrera, Antoinette
- Knight, Robert
- Ky, Teck
- Lombard, Robert
- Quach, Tin
- Vanniasegaram, Sithparran

Overview

With equity, opportunity and social justice as our guiding principles, Evergreen Valley College's mission is to empower and prepare students from diverse backgrounds to succeed academically, and to be civically responsible global citizens.

1.Student-Centered: We provide access to quality and efficient programs and services to ensure student success.

- **Access**
- **Curriculum and programs**
- **Services**

2. Community Engagement: We will transform the college image and enhance partnerships with community, business and educational institutions.
Areas of focus are:

- **Increase visibility**
- **Develop strategic partnerships**
- **Building campus community**

3.Organizational Transformation: We create a trusting environment where everyone is valued and empowered.
Areas of focus are:

- **Communication**
- **Employee development**
- **Transparent Infrastructure**

Related Assessments

- **1. Provide a brief summary of your program. Please include a brief history and discuss any factors that been important to the program's development.**

  With the founding of EVC in 1975, the Mathematics Department started offering courses in mathematics to provide a foundation for quantitative analysis, discovery, life-long learning, and reasoning. Our department is comprised of a diverse group of faculty. We offer courses from developmental to transfer-level mathematics. In addition, the program contributes to the Evergreen Valley College (EVC) mission by providing:

  - courses that satisfy degree requirements
  - skills necessary to complete a number of occupational programs
  - transfer requirements
  - coursework that fosters student growth and achievement
  - an atmosphere that celebrates cultural diversity, particularly through the Mathematics and Science Resource Center (MSRC), which is strongly supported by the math program.
  - Our Math AS-T (Associate Science for Transfer) program has been growing since the last program review. The number of students who graduated with an AS-T in Mathematics has increased significantly, especially in the three years of 2017 – 2020; 29 to 50 students completed the AS-T degree in Math each year. New courses have been added to the program to give students in the program more options. For the program assessment, the department needs to establish better consistency in course content from instructor to instructor in all courses with emphasis on the new common core forms of assessment. During the pandemic time, the department had a chance to design distance education courses for the Math AS-T degree. As of this review, we have seen no distance education data to assess the status and adequacy of those courses. While we would like to attract more students to the college and provide better access, we will maintain the course standard and increase the students' success. Different teaching modalities for high level math courses have been discussed in the department among math faculty.

- The department has faced recent challenges surrounding the implementation of AB-705. Over three years ago (https://assessment.cccco.edu/ab-705-implementation), then California Governor Jerry Brown signed AB 705 (a legislative bill) (https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB705) on October 13, 2017, and took effect January 1, 2018. AB 705 has had a significant impact on Math departments in community colleges across the state of California. Two months after the bill went into effect, the SJECCD held its first meeting (https://sjeccd.sharepoint.com/leadership-resource-documents/Shared%20Documents/03-14-2018%20Leadership%20Meeting%20Documents/03-14-2018_LeadershipMeetingNotes.pdf) to address AB 705. Since then, the EVC Math Department has worked very hard over the last three and a half years to comply with AB 705. The bill requires that we maximize the number of students who successfully reach and complete transfer level math courses within 1 year. This has led to the elimination of several of our basic skills courses (MATH 310, 311, 111, 014, and most of MATH 013). The mathematics department has had to develop new strategies to help our students with weak mathematics backgrounds. We developed MATH 063X and 021L to support students in MATH 063 and 021, respectively.
- We created MATH 066/067/070 to give students in the AS-T program more options and to support other programs such as AS-T Computer Science, AS-T Chemistry, and AS-T Physics.

- **2. Please provide an update on the program's progress in achieving the goals (3 years) set during the last comprehensive program review.**

  - The math department was able to transition into remote teaching during this pandemic since mid-Spring 2020 and most math sections are offered in-person starting Fall 2021.
  - As discussed later in Part G, our department has worked very hard over the last three and half years to help the college comply with AB 705 (since Spring 2018). We have faced these challenges by striving to find better ways to help students with weak mathematics backgrounds. For example, we have created new courses (MATH 021L, MATH 063X, and MATH 016) and significantly decreased the number of developmental Math sections we offer (from fifty-seven in Fall 2017 to three in Fall 2021). These efforts have helped to close equity gaps, which is consistent with the College's mission.
  - We created MATH 066/067/070 to give students in the AS-T program more options and to support other programs such as AS-T Computer Science, AS-T Chemistry, and AS-T Physics.
  - From 2014 – 2020 the productivity score of the math department has consistently been the highest on campus (17.9 compared to the campus average of 14.5 from 2020).

  Because there are currently many gaps in different areas, we have several future objectives:

  • We will continue to update the mission and vision statement for the Mathematics Department as needed. These should be aligned to the college mission and goals of the division and the college.

  • We have increased success rates for African American students from under 50% to 50%. Our success rates for Latinx students have decreased from 60% to 50%. We will continue to increase success rates for underperforming (less than college average) ethnic groups.

  • We have increased completion rates for Latinx from 70% to 78%. Completion rates for African American students decreased from 70% to 63%. We will continue to increase completion rates for underperforming (less than college average) ethnic groups.

• We will continue to narrow the achievement gap between the highest performing group of students and the lowest performing group of students (2% per year).

• We have increased online and hybrid offerings for transfer level courses in order to meet varying student needs for access.

• We currently do not have distance education courses for the Math AS-T degree, but we plan to offer online and hybrid options to attract more students to the college and provide better access.

• We plan to develop a reliable and precise set of assessment instruments for 80% of the courses, including those not usually taught by full time faculty.

• Since the last program review, we tried to lower the class sizes of developmental courses to less than 30 students. The district did not allow us to do this. Furthermore, because of AB 705, we may no longer offer our current developmental courses.

• We have established better consistency in course content and SLOs from instructor to instructor in all courses.

• Prior to 2016, the Mathematics Department had at its disposal a computer lab equipped with mathematical and learning software. In 2016, when the department moved from Acacia to MS3, it was initially provided with a computer lab, but this lab was subsequently used for Computer Science classes and became inaccessible to Mathematics students and faculty. If we are given space for a math computer lab and other requested technology, we will be able to employ better technology in the classrooms (in addition to much better classroom designs), from software to hardware, to make the educational environment of the classroom more collaborative and cooperative and, consequently, more conducive to student success.

• We have not been able to increase the percentage of developmental courses to be taught by full-time faculty. AB 705 has made it impossible to offer these courses. We plan to develop non-credit courses to replace these developmental courses and to support our transfer level courses.

• We will continue to offer more professional development in the area of learning theory and cooperative learning. This is a must for all faculty (including adjunct instructors). Many of our instructors appear to use a lecture format which may in itself be inadequate to the needs of our students (learning style). Indeed, the cognitive load caused by this lecture format may be hampering the progress of our lowest-performing students, thus increasing the already wide achievement gap between ethnic groups.

• We will continue to provide robust professional development activities for all faculty, tutors, and staff for Mathematics first level of transfer courses. This will give faculty the tools to implement educational, student-centered pedagogies that foster student success, including adult learning theory, cognitive learning strategies,

collaborative and cooperative learning strategies.

• We were denied the ability to provide load reduction to the faculty member who coordinates SLO efforts (coordinating assessment in 30 sections is not trivial).

• We have developed new interventions, including support courses, summer bridge programs, supplemental instruction, Statway (a Statistics curriculum that is systematically integrated with Algebra support), to increase success, retention, completion, and transfer rates.

• We will continue to obtain disaggregated student data per strand and better access to cohort data to identify learning gaps and to monitor completion and student progress at each stage of a pathway.

• We will continue to build a culture of evidence in which practitioners have robust and complete information in order to evaluate the progress and success of educational interventions and to more precisely identify achievement gaps. Moreover, the findings of program reviews need to be used for budget allocation and integrated planning.

• We will continue to review and refine program review processes to ensure that they are systematic, linked to institutional planning, resource allocation, and used to assess and improve student achievement.

• Last but not least, the Mathematics Department (staff and faculty) will continue to work on performance metrics that measure progress towards the future goals of the department. Our goals have included continued use of a student learning outcome assessment for gauging student achievement. Faculty need to be trained in multiple measures of student learning outcome achievement, such as item analysis, indirect assessment, and authentic assessment. This performance-based conception of assessment lies at the heart of what is needed to translate the Mathematics courses into a robust curriculum and assessment system at EVC.

- **3. Please state and recent accomplishments for your program and show how it contribute to the College's mission and success.**

  - The math department was able to transition into remote teaching during this pandemic since mid-Spring 2020 and most math sections are offered in-person starting Fall 2021.
  - As discussed later in Part G, our department has worked very hard over the last three and half years to help the college comply with AB 705 (since Spring 2018). We have faced these challenges by striving to find better ways to help students with weak mathematics backgrounds. For example, we have created new courses (MATH 021L, MATH 063X, and MATH 016) and significantly decreased the number of developmental Math sections we offer (from fifty-seven in Fall 2017 to three in Fall 2021). These efforts have helped to close equity gaps, which is consistent with the College's mission.
  - We created MATH 066/067/070 to give students in the AS-T program more options and to support other programs such as AS-T Computer Science, AS-T Chemistry, and AS-T Physics.
  - From 2014 – 2020 the productivity score of the math department has consistently been the highest on campus (17.9 compared to the campus average of 14.5 from 2020).

  Because there are currently many gaps in different areas, we have several future objectives:

• We updated the mission and vision statement for the Mathematics Department as needed. These should be aligned to the college mission and goals of the division and the college.

• We increased success rates for African American students from under 50% to 50%. We will continue to increase success rates for underperforming (less than college average) ethnic groups.

• We increased completion rates for Latinx from 70% to 78%. We will continue to increase completion rates for underperforming (less than college average) ethnic groups.

• We increased the number of students in the AS-T program.

• We increased online and hybrid offerings for transfer level courses in order to meet varying student needs for access.

• We established better consistency in course content and SLOs from instructor to instructor in all courses.

• We offered more professional development in the area of learning theory and cooperative learning. This is a must for all faculty (including adjunct instructors). Many of our instructors appear to use a lecture format which may in itself be inadequate to the needs of our students (learning style). Indeed, the cognitive load caused by this lecture format may be hampering the progress of our lowest-performing students, thus increasing the already wide achievement gap between ethnic groups.

• We provided robust professional development activities for all faculty, tutors, and staff for Mathematics first level of transfer courses. This will give faculty the tools to implement educational, student-centered pedagogies that foster student success including adult learning theory, cognitive learning strategies, collaborative and cooperative learning strategies.

• We developed new interventions including support courses, courses to support other programs, summer bridge programs, supplemental instruction, Statway, to increase success, retention, completion, and transfer rates.

• We obtained disaggregated student data per strand and better access to cohort data to identify learning gaps and to monitor completion and student progress at each stage of a pathway.

• We built a culture of evidence in which practitioners have robust and complete information in order to evaluate the progress and success of education interventions and to more precisely identify achievement gaps. Moreover, findings of program reviews need to be used for budget allocation and integrated planning.

• We reviewed and refined program review processes to ensure that they are systematic, linked to institutional planning, resource allocation, and used to assess and improve student achievement.

• We worked on performance metrics that measure progress towards the future goals of the department. Our goals have included continued use of a student learning outcome assessment for gauging student achievement. Faculty need to be trained in multiple measures of student learning outcome achievement, such as item analysis, indirect assessment, and authentic assessment. This performance-based conception of assessment lies at the heart of what is needed to translate the Mathematics courses into a robust curriculum and assessment system at EVC.

- **4. If you received resource allocation for your last program review cycle, please indicate the resources you received and how these resources were utilized to impact student success and / or importance to your program. (The resources can be personnel or fiscal)**

    - The math department did not receive any recourse allocation for the last program review.

- **5. Please describe where you would like your program to be three years from now (Program goals) and how the college mission, strategic Initiatives and student success.**

    Because there are currently many gaps in different areas, we have several future objectives:

    • We will continue to update the mission and vision statement for the Mathematics Department as needed. These should be aligned to the college mission and goals of the division and the college.

    • We will continue to increase success rates for underperforming (less than college average) ethnic groups.

    • We will continue to increase completion rates for underperforming (less than college average) ethnic groups.

    • We will continue to narrow the achievement gap between the highest performing group of students and the lowest performing group of students (2% per year).

    • We will continue to increase online and hybrid offerings for transfer level courses in order to meet varying student needs for access.

    • We currently do not have distance education courses for the Math AS-T degree, but we plan to offer online and hybrid options to attract more students to the college and provide better access.

    • We plan to develop a reliable and precise set of assessment instruments for 80% of the courses, including those not usually taught by full-time faculty.

    • We will continue to develop better consistency in course content and SLOs from instructor to instructor in all courses.

    • Prior to 2016, the Mathematics Department had at its disposal a computer lab equipped with mathematical and learning software. In 2016, when the department moved from Acacia to MS3, it was initially provided with a computer lab, but this lab was subsequently used for Computer Science classes and became inaccessible to Mathematics students and faculty. If we are given space for a math computer lab and other requested technology, we will be able to employ better technology in the classrooms (in addition to much better classroom designs), from software to hardware, to make the educational environment of the classroom more collaborative and cooperative and, consequently, more conducive to student success.

    • We have not been able to increase the percentage of developmental courses to be taught by full-time faculty. AB 705 has made it impossible to offer these courses. We plan to develop non-credit courses to replace these developmental courses and to support our transfer level courses.

• We will continue to offer more professional development in the area of learning theory and cooperative learning. This is a must for all faculty (including adjunct instructors). Many of our instructors appear to use a lecture format which may in itself be inadequate to the needs of our students (learning style). Indeed, the cognitive load caused by this lecture format may be hampering the progress of our lowest-performing students, thus increasing the already wide achievement gap between ethnic groups.

• We will continue to provide robust professional development activities for all faculty, tutors, and staff for Mathematics first level of transfer courses. This will give faculty the tools to implement educational, student-centered pedagogies that foster student success, including adult learning theory, cognitive learning strategies, collaborative and cooperative learning strategies.

• We will maintain new interventions, including support courses, summer bridge programs, supplemental instruction, Statway (a Statistics curriculum designed with systematic integration of Algebra), to increase success, retention, completion, and transfer rates.

• We will continue to obtain disaggregated student data per strand and better access to cohort data to identify learning gaps and to monitor completion and student progress at each stage of a pathway.

• We will continue to build a culture of evidence in which practitioners have robust and complete information in order to evaluate the progress and success of educational interventions and to more precisely identify achievement gaps. Moreover, the findings of program reviews need to be used for budget allocation and integrated planning.

• We will continue to review and refine program review processes to ensure that they are systematic, linked to institutional planning, resource allocation, and used to assess and improve student achievement.

• We will continue to work on performance metrics that measure progress towards the future goals of the department. Our goals have included continued use of assessments to improve student achievement. Faculty need to be trained in multiple measures of student learning outcome achievement, such as item analysis, indirect assessment, and authentic assessment. This performance-based conception of assessment lies at the heart of what is needed to translate the Mathematics courses into a robust curriculum and assessment system at EVC.

Program Set Standards (Summary Tab)

Overall, EVC's Institution Set Standard for success rate is 72%, and the aspirational goal for student success is 75%.

Success Rate (completion with "C" or better)	Program	EVC	Program Set Standard (established during last comprehensive PR)	Program Success Goal (new)
F'14-F'20 average		71.10%		

Courses with no Degree or Certification

Program Success Rate 59.9%

***Program Set Standard* : It is recommended that programs identify a success standard. This standard should reflect the baseline success rate.**

Program Set Standard 54.5% (S19-F20)

***Recommendation:* 90% of the 2 year average success rate could be your program standard (average x 0.9).**

***Program Success Goal* : It is recommended that programs identify a success goal. This goal should reflect the success rate to which your program aspires.**

Program Success Goal 70%

- **Is your program success rate higher or lower than the campus?**

  Our Program Success Rate from Fall 2014 to Fall 2020 has been consistently LOWER than that of the campus.

- **If your success rate is higher than the campus, how are you helping students succeed in and outside the classroom? If your program success rate is lower, what are some strategies your program is implementing to improve?**

  This may be due to a wide variety of factors ranging from the overall greater difficulty of the Mathematics curriculum as compared to other disciplines, the passage of AB 705 which eliminated the requirement of remedial courses when indicated and necessary, AND a pandemic which has eliminated the ability for students to attend face-to-face classes as well as get face-to-face help from resources like the Math Science Resource Center (MSRC). With the implementation of AB 705, students often need to retake a transfer level course before they are able to pass. This brings down our overall success rate and retention rate.

  Our department has designated lead instructors for each mathematics course. Lead instructors create recommended SLO questions to be assessed for all the sections of the course to standardize course content. Additionally, our department regularly reviews our Student and Program Learning Outcomes in order to identify weaknesses and improve course materials. Finally, our department faculty members participate in Early Alert in order to identify students who may need additional tutoring for our courses.

  In 2020, our faculty created MATH 063X and MATH 021L to support students taking Elementary Statistics and Precalculus courses. These supplemental courses are some of our strategies that we are using to increase the success rate in our department.

- **Is the current program success rate higher than the program set standard?**

  The current program success rate is higher than the program set standard.

- **How close is the program to meeting the program success goal?**

  The more recent measures of the Math program success have shown an upward trend in attaining our success goal. The most recent success rate was within five percentage points of the desired success rate. As our AB 705 strategies become more established and students learn about the offerings of our new support courses (MATH 063X and 021L), student success rates will continue to climb.

- **Are these measures (program set standard and program success goal) still current/accurate? If not, please describe here and reset the standards.**

  Yes, the program set standard for program success is still current and accurate.

Success Rates: Measures by IPEDs Race/Ethnicity

- **American Indian**

  Program Average Total Enrolled
  13.460

  Program Success Rate
  76.420

- **Asian**

Program Average Total Enrolled
1191.000

Program Success Rate
72.180

- **Black or African American**

  Program Average Total Enrolled
  75.770

  Program Success Rate
  49.580

- **Hawaiin/Pacific Islander**

  Program Average Total Enrolled
  12.150

  Program Success Rate
  49.860

- **Hispanic**

  Program Average Total Enrolled
  1388.770

  Program Success Rate
  49.560

- **Two or More Races**

  Program Average Total Enrolled
  90.000

  Program Success Rate
  55.140

- **Unknown**

  Program Average Total Enrolled
  258.620

  Program Success Rate
  60.060

- **White**

  Program Average Total Enrolled
  184.380

  Program Success Rate
  63.000

Success Rates: Measures by Gender

- **Female**

  Program Average Total Enrolled
  1625.150

  Program Success Rate
  62.600

- **Male**

Program Average Total Enrolled
1579.690

Program Success Rate
57.000

- **No Value Entered**

  Program Average Total Enrolled
  9.460

  Program Success Rate
  69.440

Success Rates: Measures by Age

- **17 & Below**

  Program Average Total Enrolled
  87.690

  Program Success Rate
  82.740

- **18-24**

  Program Average Total Enrolled
  2366.920

  Program Success Rate
  56.660

- **25-39**

  Program Average Total Enrolled
  573.150

  Program Success Rate
  64.820

- **40 & Over**

  Program Average Total Enrolled
  184.460

  Program Success Rate
  74.110

- **Unknown**

  Program Average Total Enrolled
  2.250

  Program Success Rate
  58.730

- **a. With respect to disaggregated success rates, list any equity gaps that are identified and discuss interventions your program will implement to address these equity gaps? Please include a timeline of implementation and reassessment.**

The mathematics program success rates are about 11% - 16% less than the rest of campus (see measures by Race/Ethnicity, Gender, and Age). Our program is lower in all the categories. The largest discrepancies are Hispanic (-14.33%, n=9722), Hawaiian/Pacific Islander (-15.93%, n=85), Black or African American (-11.34%, n=985) Men (-11.43%, n=11,058), and 18-24 years old (-11.5%, n=16,569).

To address the equity gaps and to help all mathematics students succeed, the department recommends adding more hours to our Math and Science Resource Center to meet the needs of afternoon, night and weekend students. We also need to have the lab open during Intersessions. We also have office hours on Zoom for students who cannot come to the campus for office hours. Class tutors are currently available, especially sections with a support class, and we want to expand this offering to more sections.

Prior to 2016, the Mathematics Department had at its disposal a computer lab equipped with mathematical and learning software. In 2016, when the department moved from Acacia to MS3, it was initially provided with a computer lab, but this lab was subsequently used for Computer Science classes and became inaccessible to Mathematics students and faculty.

A computer lab for the Mathematics Department is indispensable, as it will provide unique opportunities for instruction and collaboration, promote equity, and prepare students for a workplace that is increasingly technological.

The Mathematics Department currently needs 50 laptops equipped with Math software, such as Minitab, Maple, Matlab, MathType, etc. for use in the classroom, as well as graphing calculators for students. The department also needs laptops/tablets for faculty to use as teaching tools for lectures in classes. Bluetooth-enabled computers and projectors would also help instructors enrich lecture delivery.

We have filled two positions to help close these gaps in collaboration with the Umoja-AFFIRM, and ENLACE programs. Both programs offer MATH 063X and MATH 021L support sections.

These measures will be implemented by Fall 2022 and reassessed in Spring 2023.

- **b. With respect to disaggregated success rates (ethnicity / race, gender and age), discuss student performance in reaching your program set standard for student success as well as reaching the program success goal.**

Although student performance is slightly below the standard set for student success, much of the recent gap may be attributed to AB 705 and the global pandemic. The more recent measures of the Math program success have shown an upward trend in attaining our success goal. The most recent success rate was within four percentage points of the desired success rate. As our AB 705 strategies become more established and students learn about the offerings of our new support courses (MATH 063X and MATH 021L), student success rates will continue to climb.

- **c. If your program offers course sections fully online, please contact the office of Research, Planning and Institutional Effectiveness to obtain a student success report on the online sections. Address any differences in student success rates between fully online courses and classroom courses.**

The average success rate for online math courses is 55.30%. The differences between online courses and face-to-face courses may be due to students not being fully prepared for the commitment required for success in online courses.
It is important to note that these online courses were taken by students during the worldwide pandemic when there was no choice other than online classes. Many of the students taking these online courses may very well have never taken an online math course before, and as such may not have had the proper background and/or understanding of how an online course should be approached.

Program Awards - If Applicable

If the classes in your program lead to a degree or certificate, please visit the DataMart and indicate how many degrees/certificates were awarded in your program:
http://datamart.cccco.edu/Outcomes/Program_Awards.aspx
(http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

You will need to select drop down menus and then "select program type by major of study" (for example, select Legal for paralegal studies).

Then at the bottom of the report, select the box "program type- four digits TOP", then update report to get program specific information.

Degree Type

- **AS-T**

  Number of Awards (Examine 2014-15, 2015-16, 2016-17,2017-18 data 2018-19 data and 2019-20 data)

  Discussion
  Compared to our last program review, the number of students who graduated with an AS-T in Mathematics has increased significantly, especially in the three years 2017 – 2020, from 29 to 50 students completed the AS-T degree in Math each year. However, in the years of 2020 – 2021, the number started declining due to the pandemic happening worldwide. New course offerings (MATH 066/067/070) and increased numbers of other sections in the program are likely contributing to this success. Even though most of the courses in AS-T program (higher level math) are taught by full-time faculty, the department needs to establish better consistency in course content from instructor to instructor in all courses with emphasis on the new common core forms of assessment. During the pandemic, the department had a chance to design distance education courses for the Math AS-T degree. As of this review, we have seen no distance education data to assess the status and adequacy of those courses. While we would like to attract more students to the college and provide better access, we will maintain the course standard and increase the students' success. Different teaching modalities for high level math courses have been discussed in the department among math faculty.

  Historically, the Mathematics Department had at its disposal a computer lab equipped with mathematical and learning software that was accessible to Mathematics students and faculty. Since 2016, when the department moved from Acacia to MS3, it was initially provided with a computer lab, but this lab was subsequently used for Computer Science classes and became inaccessible to Mathematics students and faculty.

  To continue to grow this number, we would need more support and resources for our program. We greatly need a math computer lab room to provide enrichment to our instruction and better prepare our students. Employing better technology in the classroom from software to hardware will make the educational environment of the classroom more collaborative and cooperative, and consequently, more conductive to student success.

Student Enrollment Types

Related Assessments

Student Enrollment Type: Day or Evening Student

- **Day: 4721 - 51.130%**

  Program Average Headcount
  3276.000

  Program Percentage of Total
  55.400

- **Day & Evening: 3111 - 33.690%**

  Program Average Headcount
  2087.000

  Program Percentage of Total
  35.300

- **Evening: 1061 - 11.490%**

  Program Average Headcount
  418.000

  Program Percentage of Total
  7.100

- **Unknown: 341 - 3.700%**

  Program Average Headcount
  131.000

  Program Percentage of Total
  2.200

Student Enrollment Type: Academic Load

- **Full Time: 2259 - 24.450%**

  Program Average Headcount
  2038.000

  Program Percentage of Total
  37.100

- **Half Time or less than half time: 6214 - 67.280%**

  Program Average Headcount
  3452.000

  Program Percentage of Total
  62.900

- **a. Discuss any changes in program enrollment types (day vs evening, full-time vs part-time) since your last program review?**

  Annual student enrollment remained pretty consistent between F2014-F2020 (average of 3129 students/year). There was a slight dip (2480 students) in enrollment in Spring 2020 and Fall 2020, which was probably influenced by the "uncertainty" of the pandemic and the required reduction of developmental sections as mandated by AB 705. Our section counts for developmental courses have dropped from at least 40 down to 2. These will be fully eliminated starting in Summer 2022.

  Day student enrollment comprised 54% of students, while evening student enrollment comprised 7.1%. 35.3% of students are enrolled in a combination of day and evening courses. Full-time student enrollment comprised 37.1% and half-time and or less than half-time student enrollment comprised 62.9%.

- **b. Discuss how do your program enrollments (Pct of total) compare to EVC?**

Overall program enrollment (Pct of total) has slightly increased for Day and Day & Evening students when compared to EVC. The program enrollment (Pct of total) for the Evening and Unknown is lower when compared to EVC.

- **c. Based on the data, would you recommend any changes?**

  The department will work with the dean to open some more night classes, and we are hoping to find faculty to fill those new sections.

Student Demographics - Headcount

Related Assessments

Student Demographic: Gender

- **Female: 5022 - 54.390%**

  Program Headcount
  1586.000

  Program Percentage of Total
  50.670

- **Male: 4176 - 45.220%**

  Program Headcount
  1534.000

  Program Percentage of Total
  49.040

- **No Value Entered: 36 - 0.390%**

  Program Headcount
  9.000

  Program Percentage of Total
  0.280

Student Demographic: Age

- **17 & Below: 465 - 5.000%**

  Program Headcount
  87.000

  Program Percentage of Total
  2.800

- **18-24: 5542 - 59.990%**

  Program Headcount
  2302.000

  Program Percentage of Total
  73.520

- **25-39: 2214 - 24.010%**

  Program Headcount
  558.000

Program Percentage of Total
17.870

- **40 & Over: 1006 - 10.900%**

  Program Headcount
  180.000

  Program Percentage of Total
  5.740

- **Unknown: 9 - 0.100%**

  Program Headcount
  2.000

  Program Percentage of Total
  0.070

Student Demographic: Race/Ethnicity (IPEDs Classification)

- **American Indian: 45 - 0.480%**

  Program Headcount
  13.000

  Program Percentage of Total
  0.420

- **Asian: 3675 - 39.790%**

  Program Headcount
  1159.000

  Program Percentage of Total
  37.260

- **Black or African American: 218 - 2.360%**

  Program Headcount
  75.000

  Program Percentage of Total
  2.380

- **Hawaiin/Pacific Islander: 38 - 0.410%**

  Program Headcount
  12.000

  Program Percentage of Total
  0.390

- **Hispanic: 3650 - 39.500%**

  Program Headcount
  1350.000

  Program Percentage of Total
  42.960

- **Two or More Races: 245 - 2.650%**

  Program Headcount
  88.000

Program Percentage of Total
2.800

- **Unknown: 773 - 8.390%**

  Program Headcount
  252.000

  Program Percentage of Total
  8.040

- **White: 591 - 6.420%**

  Program Headcount
  180.000

  Program Percentage of Total
  5.750

- **a. Based on the program total headcount and percent change year to year, discuss if your program growing or declining. If so, what do you attribute these changes in enrollment to and what changes will the program implement to address them?**

  The mathematics program is declining. This slight decline may be attributed by the passage of AB 705, which eliminated the requirement for remedial courses when indicated and necessary, AND a pandemic which has eliminated the ability for students to attend face-to-face classes as well as get face-to-face help with resources like the Math Science Resource Center (MSRC).

- **b. Discuss any gaps have you identified in your program. Discuss how your program enrollment is similar or different from the campus. Discuss which gender, age, and/or ethnic group are proportionally smaller than campus make up.**

  There seem to be more female students (54.39%) than male students (45.22%) attending courses in the mathematics department; however, the enrollment reflects that of the campus. The two primary ethnic groups are Asian and Hispanic students; however, the enrollment reflects the number of residents living nearby the campus.

- **c. Discuss what interventions the program can implement to address any gaps in enrollment.**

  We need to recruit more African American and Latinx students for mathematics courses. We will increase local outreach and work with Umoja-AFFIRM and ENLACE programs to increase recruiting and close enrollment gaps. We will continue to offer program-specific sections to attract more students from these underrepresented groups.

Institutional Effectiveness (5 year average, see Summary Tab)

EVC Capacity: 62.49% EVC Productivity: 14.72

Program Capacity
73.04%

Program Productivity

18.83

Is your capacity rate higher or lower then the campus?
The capacity for the mathematics program is higher then the campus.

Is your productivity goal higher or lower than the campus?
Our program productivity is higher than the campus.

If the program capacity and/or productivity is lower than the campus, please provide rationale:

Curriculum

Related Assessments

Courses with no Degree or Certification

- **1. Identify and updates to curriculum since the last comprehensive program review, including and new programs and indicate the 6-year timeline for scheduled course outline revision. For CTE, the time line is 2 year.**

  The curriculum in the Mathematics Department has changed significantly since 2015 due to Assembly Bill No. 705 (Guided Pathways), and updated programs from other departments.

A. Guided Pathways - In 2015, a guided pathways model was proposed. This model aims to help students clarify and achieve their educational goals by ensuring that colleges align their courses into programs of study. The department has improved courses' schedules and sequencing to make the student experience more streamlined. The math department in 2017 created MATH 064 and MATH 065 – Integrated Statistics I and II with the purpose of helping students to complete statistics faster.

B. AB 705 - In 2018, AB 705 was signed. It requires California community colleges to maximize the probability that a student will enter and complete transfer-level coursework in math within a one-year timeframe. To be AB 705 compliant, we designed MATH 021L and MATH 063X to provide just-in-time instruction for students who have completed algebra but want to receive additional academic support. The department also created MATH 016 – Algebra with Geometry Concepts for STEM students who need more review in Algebra and Geometry before entering any transfer level math course.

C. New math courses to support other programs – As the Chemistry and Computer Science Departments expanded in the last couple years, AS-T in Chemistry and AS-T in Computer Science were created. In order to support them, MATH 066 and MATH 067 – Calculus I and II Late Transcendental for STEM were developed to fulfill their requirements. These courses also give more options for students majoring in Math, Physics and Engineering as well. MATH 070 was also reactivated to support the Computer Science Department.

D. Course Deactivation - While organizing all the courses, MATH 300 – Basic Mathematics Skills and MATH 051 – Mathematics for General Education were removed due to low enrollment. Also, when AB 705 took place, with the requirement of completing transfer-level math within a one year timeframe, we deactivated MATH 310 – Basic Mathematics, MATH 311 – PreAlgebra, MATH 016 - Algebra with Geometry Concepts, MATH 111 - Beginning Algebra (currently in review for deactivation), and MATH 064 and MATH 065 – Integrated Statistics. The last two courses were deactivated because of lack of enrollment.

E. AS-T in Mathematics - Mathematics AS-T has been modified with the change of the courses' curriculum and approved by the state. However, the AA in General Studies with Emphasis in Mathematics for secondary teaching was removed due to low enrollment and the lack of the lead faculty - Steve Matusow - who retired many years ago and has never been replaced.

F. Course Review: All math courses in the department have been updated within the last six years except MATH 078 – Differential Equations – which is in the process of being updated.

G. Timeline for scheduled course outline revision

H.

Course #	Title	Revision Scheduled	Comment
MATH 111	Elementary Algebra	Fall 2022	Deactivation (in review)
MATH 013	Intermediate Algebra	Fall 2022	
MATH 014	Geometry	Fall 2022	Deactivation (in discussion)
MATH 021	Precalculus Algebra	Fall 2025	
MATH 021L	Precalculus Support	Fall 2025	
MATH 022	Trigonometry	Fall 2025	
MATH 025	Precalculus Algebra and Trigonometry	Fall 2025	
MATH 052	Mathematics for Elementary Education	Spring 2023	
MATH 061	Finite Mathematics	Fall 2025	
MATH 062	Calculus for Business and Social Science	Fall 2027	
MATH 063	Elementary Statistics	Fall 2025	
MATH 063X	Statistics Support	Fall 2025	
MATH 066	Calculus I Late Transcendentals for STEM	Fall 2024	
MATH 067	Calculus II Late Transcendentals for STEM	Fall 2026	
MATH 070	Discrete Mathematics	Fall 2026	
MATH 071	Calculus I with Analytic Geometry	Fall 2022	
MATH 072	Calculus II with Analytic Geometry	Fall 2026	
MATH 073	Multivariable Calculus	Fall 2026	
MATH 078	Differential Equations	Fall 2022	
MATH 079	Linear Algebra	Fall 2026	

- **2. Identify all the courses offered in the program and describe how these courses remain relevant in the discipline. For courses your program has not offered in the past two years, please discuss a plan on how to deal with these courses (if your program is not going to de-activate these courses, please explain why).**

Developmental Mathematics Courses

Mathematics 111 – Elementary Algebra

Mathematics 013 – Intermediate Algebra

Mathematics 014 – Geometry

College-level Mathematics

Mathematics 021 – Precalculus Algebra

Mathematics 021L – Precalculus Support

Mathematics 022 – Trigonometry

Mathematics 025 – Precalculus Algebra and Trigonometry

Mathematics 052 – Mathematics for Elementary Education

Mathematics 061 – Finite Mathematics

Mathematics 062 – Calculus for Business and Social Science

Mathematics 063 – Elementary Statistics

Mathematics 063X – Statistics Support

Mathematics 066 – Calculus I Late Transcendentals for STEM

Mathematics 067 – Calculus II Late Transcendentals for STEM

Mathematics 070 – Discrete Mathematics

Mathematics 071 – Calculus I with Analytic Geometry

Mathematics 072 – Calculus II with Analytic Geometry

Mathematics 073 – Multivariable Calculus

Mathematics 078 – Differential Equations

Mathematics 079 – Linear Algebra

Even though many of the students who attend Evergreen Valley College (EVC) are still in dire need of remediation in mathematics, due to AB 705, a large number of developmental math courses has been cut down from the schedule. All sections of MATH 310, MATH 311, MATH 111, and MATH 014 courses are no longer offered. Only 3-4 sections of MATH 013 – Intermediate Algebra are offered each semester since Spring 2020, and two of which are for Special Programs (Enlace and Umoja-AFFIRM). For those students who need additional academic support before taking a transfer-level math course, they can enroll in one of the four sections of MATH 021L-Precalculus Support, and three sections of MATH 063X-Statistics Support.

Students must complete at least one college-level mathematics course to earn an associate degree or transfer to a four-year university to earn a baccalaureate degree. This requirement can be met by completing a course in Precalculus Algebra, Mathematics for Elementary Education, Finite Mathematics, Calculus for Business and Social Science, or Elementary Statistics. Compared to six years ago, the number of transfer-level math courses increased. In Fall 2020, EVC offers seven sections of MATH 021-Precalculus Algebra, one section of MATH 061-Finite Mathematics, three sections of MATH 062-Calculus for Business and Social Science, and 28 sections of Elementary Statistics. Courses in Finite Mathematics and Calculus for Business and Social Science target students majoring in Business. The college offers the 28 sections of Elementary Statistics for students who are majoring in Business, Nursing, or Psychology, as well as students satisfying a general educational requirement.

For students in the STEM fields such as Physics, Chemistry, Engineering, and Computer Science, as well as Mathematics majors, the department increased the number of sections since the last program review. In Fall 2020, EVC offered seven sections of Precalculus Algebra, two sections of Trigonometry, six sections of Precalculus Algebra and Trigonometry, one section of Calculus I (Late Transcendentals), six sections of Calculus I, three sections of Calculus II, three sections of Multivariable Calculus, two sections of Linear Algebra, and one section of Differential Equations.

MATH 070-Discrete Mathematics is a new course that was offered for the first time in Spring 2021.

- **3. If you have a degree or certificate, please include a diagram of your program's guided pathways program map. (A program map indicates courses suggested for each semester, across two years, upon completion a student would qualify for a degree/certificate).**

The Math Department has offered an AS-T in Mathematics. A guided pathways program map has been created as follows.

High School Preparation: Courses in physics, chemistry, four years of high school mathematics are required. If this preparation is not complete, Evergreen Valley College offers courses to meet this preparation. If the preparation is not complete, it may take more than two years to complete this degree.

Term 1	Units	CSU GE	IGETC FOR CSU	NOTES
MATH 071 or MATH 066	4-5	B4	2A	
ENGL 001A	3	A2	1A	
GE	3	A1	1C	
GE	3	C1	3A	
Total Units	**13-14**			

Term 2	Units	CSU GE	IGETC for CSU	NOTES
MATH 072 or MATH 067	4-5			
GE	3	A3	1B	
GE	3	C2	3B	
GE	3	E	Transferable Elective	
GE	3	D	4	
Total Units	**16-17**			

Term 3	Units	CSU GE	IGETC for CSU	NOTES
MATH 073	5			
GE	3	C1 or C2	3A or 3B	
GE	3	B2	5B	
GE	3	D	4	US-1, US-2, US-3
Total Units	**14**			

Term 4	Units	CSU GE	IGETC for CSU	NOTES
MATH 079	3			or MATH 078
PHYS 004A or PHYS 007A	4-5	B1/B3	5A/5C	or other LIST B option
GE	3	D	4	US-1, US-2, US-3
Transferable Electives	4-7			As needed to reach a total of 60 transferable units; MATH 078 strongly recommended
Total Units	**15-17**			

* CSU Graduation Requirement: Students must complete a set of courses that meet the US-1, US-2 and US-3 American Institutions Requirement

- **4. Identify and describe innovative strategies or pedagogy your department/program developed/offered to maximize student learning and success. How did they impact student learning and success?**

The Mathematics department has continued a wide range of innovative strategies that suit the varied needs and learning styles of our students. Some of these practices include the following:

1. Technological innovation

The web-based course management systems such as MyMathLab, MyStatLab, MyMathText, and Enhanced WebAssign have been incorporated into many of our mathematics offerings. These systems provide an interactive homework component with pre-worked examples, step-by-step interactive problems, selected videos, text references, direct e-mail to the instructor with reference to a particular problem, and quizzes. In addition, students who use MyMathLab are eligible for free phone tutoring in the evening.

Online courses and web mediated courses enable the students to listen to video lessons created by the instructor as well as those created by the authors of online textbooks. These courses make use of electronic texts, costing only a fraction of the cost of traditional textbooks. The number of online and hybrid courses is increasing. In Fall 2020, we offered 2 online/hybrid courses for MATH 025, and 6 online/hybrid courses for MATH 063. The department plans to extend online/hybrid courses in MATH 021, 022, 062, 070.

Since the pandemic took place in March 2020, all math courses needed to convert to synchronous modality, and all faculty are either certified to teach online or have completed 20 hours of the summer training bootcamp to meet the requirement.

2. Honors Projects

In the past, we used to have one of our faculty members supervise honor students' projects in Multivariable Calculus, Differential Equations, and Linear Algebra. These projects address problems which were deeper and more difficult than those typically encountered on these courses. When a student's work is particularly good, the student has an opportunity to present his or her work in a student session at a mathematics conference sponsored by the Mathematical Association of America. However, this faculty retired several years ago and this position has never been replaced.

3. Mathematics Education

The department offers two courses that are directed at future elementary school teachers: Mathematics for Elementary Education, EDU 012, and EDU 013. Students are trained to use mathematics manipulatives and give oral teaching presentations. However, due to lack of faculty and resources, these courses are no longer offered since 2017. Currently, they are in revision for deactivation.

4. Special Program (ENLACE/Umoja-AFFIRM)

ENLACE and Umoja-AFFIRM courses in Mathematics include lectures/ labs that offer hands-on learning in a collaborative, bilingual, and multicultural setting. Group work and culturally relevant, and a mastery approach are some of the features of these classes. Students are required graphing calculators in MATH 013 – Intermediate Algebra and MATH 063 – Statistics. ALEKS, a research-based, online learning program, is also being incorporated into some of these classes. The ENLACE's STEM projects seek to recruit, support and transfer students into STEM careers. Many of these students are working as tutors in the Math and Science Resource Center. MATH 013 sections need to be retained for our special programs.

- **5. Discuss plans for future curricular development and/or program degrees & certificates included) modification.**

In 2011, the department established an Associate Degree for Transfer (AS-T) in Mathematics. During the past years, the department has updated the program several times. The latest version of our AS-T in Mathematics is the following:

I. Statement of Program Goals and Objectives

The Associate in Science Transfer in Mathematics (AS-T) degree is based on the approved Transfer Model Curriculum provided by the Academic Senate for California Community Colleges in accordance to SB1440 and California Education code sections 66746-66749. The Associate in Science in Mathematics for Transfer degree is designed to prepare students to seamlessly transfer into the California State University (CSU) system and complete a baccalaureate degree in Mathematics or similar field of study.

Upon completion of the Associate in Science in Mathematics for Transfer, the student should be able to:

- develop creative and logical solutions to various abstract and practical problems.
- use mathematics to model and solve applied problems in engineering and science.
- demonstrate didactic reasoning to construct elementary proofs to theorems.

II Catalog Description

Mathematics has been an important academic discipline in its own right for over 2500 years. In addition, mathematics provides the foundation for the study of physical, biological, health and computer sciences, engineering, statistics, economics, and many other disciplines. Graduates who complete a baccalaureate degree in Mathematics are prepared for employment as computer programmers, actuaries, data analysts, financial analysts, operations researchers, and educators. Others continue their studies and pursue advanced degrees in business, medicine, and law.

The Associate in Science in Mathematics for Transfer (AS-T) degree is intended for students who plan to complete a baccalaureate degree in Mathematics or a related field of study at a California State University. Students who complete this degree are guaranteed admission to the CSU system, *but not to a particular campus or major*. Students transferring to a CSU campus that accepts the Associate in Science in Mathematics for Transfer will be required to complete no more than 60 semester units after transfer to earn a baccalaureate degree.

To be awarded the Associate in Science in Mathematics for Transfer degree, students must:

(1) Complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(a) The CSU General Education - Breadth (CSU GE - Breadth) or The Intersegmental General Education Transfer Curriculum (IGETC) for California State University (CSU).

(b) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Maintain a minimum grade point average of 2.0.

While a minimum of 2.0 is required for admission, some majors may require a higher GPA. Please consult with a counselor for more information.

Associate Degrees for Transfer (ADTs) also require that students earn a “C” or better in all courses required for the major or area of emphasis. A “P” (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis.

Students should meet with their counselors as early as possible in order to develop an effective educational plan.

ASSOCIATE IN SCIENCE DEGREE IN MATHEMATICS FOR TRANSFER

REQUIRED CORE COURSES UNITS

MATH 071 Calculus I with Analytic Geometry.....5.0

MATH 072 Calculus II with Analytic Geometry 5.0

MATH 073 Multivariable Calculus 5.0

OR

MATH 066 Calculus I Late Transcendentals for STEM 4.0

MATH 067 Calculus II Late Transcendentals for STEM.....4.0

MATH 073 Multivariable Calculus 5.0

Total Core Units: 13.0 - 15.0

Students must also complete a minimum of six units from Group A and Group B with at least three units (and possibly seven) selected from Group A.

Group A

MATH 078 Differential Equations 4.0

MATH 079 Linear Algebra 3.0

Group B

COMSC 072 or MATH 070 Discrete Mathematics..... 4.0

COMSC 075 Computer Science I: Introduction to Program Structures .. 3.0

MATH 063 Elementary Statistics..... 3.0

PHYS 004A or PHYS 007A General Physics..... 5.0/4.0

Total Required Units: 19-24.0

CATEGORY UNITS

Units in Major..... 19- 24.0

CSU GE or IGETC 37- 39.0

Possible double counting of CSU GE or IGETC..... 3 - 7.0

Transferable Electives for CSU.....1 - 8.0

Transferable Electives for IGETC.....3 - 10

Total Units 60.0

Plans for future curricular development and/or program modification

1. AS-T in Mathematics

The AS-T in Math is now currently in review due to the course's deactivation of COMCS 072, and the purpose of a streamlined SLO assessment. MATH 066, MATH 067, MATH 070 have been added to the program, and COMSC 072 has been removed. With the addition of these courses, the program will attract more students since they will have more options to select courses to fulfill their needs (e.g. different variety of courses and/or fewer unit courses). Also, the PLOs will map directly to the core courses MATH 066, 067, 071, 072, 073, 078, 079 only. This update is tentatively scheduled for Fall 2022, which will help us to complete the program assessment in the most effective way for accreditation purposes. We will keep updating the program every six years as required.

2. Course's development

Due to AB 705, most of the basic skills and developmental math courses are either deactivated or no longer offered. MATH 013 used to have the largest enrollment in the past, and now the department can offer only two sections, and it will be removed from the course's schedule in Fall 2022. Since this course is still in great need of our students, the department is in discussion of creating non-credit courses for these math courses, with the hope of helping students, especially in special programs, to close the achievement gap. For all existing courses, we will keep them all updated as scheduled (see Curriculum #1).

- **6. Describe how your program is articulated with High School Districts, and/or other four year institutions. (Include articulation agreements, CID, ADTs...)**

Students who attend middle schools and high schools that feed into the San Jose/Evergreen Community College District can take Precalculus Algebra and Trigonometry, and Elementary Statistics, and receive high school credit. Moreover, students are able to get credit for MATH 071 and MATH 072 by taking the AP Calculus exam.

Precalculus Algebra, Precalculus Algebra and Trigonometry, Finite Mathematics, Calculus for Business and Social Science, Elementary Statistics, Calculus Late I, and II Transcendental for STEM, Calculus I with Analytic Geometry, Calculus II with Analytic Geometry, Calculus I Late Transcendentals for STEM, Calculus II Late Transcendentals for STEM, Multivariable Calculus, Linear Algebra and Differential Equations, all of these courses are all C-ID approved, and transferable to the California State University and the University of California.

Discrete Mathematics is in the progress of obtaining C-ID approval as a math course. While it's not C-ID approval for a computer science course, the department is working with other four-year institutions to get the course articulation. The math department at SJSU has approved our MATH 072 to be equivalent to their MATH 42.

Linear Algebra and Differential Equations are transferable to most of UC and CSU. Some University of California campuses combine Differential Equations and Linear Algebra and give students credit only if they have taken both.

- **7. If external accreditation or certification is required, please state the certifying agency and status of the program.**

  This is not applicable since Mathematics is not a vocational program.

Student Learning Outcome and Assessment

Related Assessments

Student Learning Outcomes

Program Learning Outcomes

- **1. On the program level, defined as a course of study leading to degree or certificate, list the Program Learning Outcomes (PLOs), and how they relate to the GE/ILOs (http://www.evc.edu/discover-evc/student-learning-outcomes-%28slos%29 (http://www.evc.edu/discover-evc/student-learning-outcomes-%28slos%29)). Please also indicate how the course SLOs have been mapped to the PLOs. If you are completing this program review as a department or discipline and do not offer any degrees or certificates, please write N/A in this space.**

Associate in Science in Mathematics for Transfer (2MATH.AST.1**)**

The Associate in Science in Mathematics for Transfer (AS-T) degree is intended for students who plan to complete a baccalaureate degree in Mathematics or a related field of study at a California State University. Students who complete this degree are guaranteed admission to the CSU system, *but not to a particular campus or major*. Students transferring to a CSU campus that accepts the Associate in Science in Mathematics for Transfer will be required to complete no more than 60 semester units after transfer to earn a baccalaureate degree.

Program Learning Outcomes

Upon completion of the Associate in Science in Mathematics for Transfer, the student should be able to:

- Develop creative and logical solutions to various abstract and practical problems.
  - ILO mapping: inquiry and reasoning
- Use mathematics to model and solve applied problems in engineering and science.
  - ILO mapping: communication, and inquiry and reasoning
- Demonstrate didactic reasoning to construct elementary proofs to theorems.
  - ILO mapping: communication, and inquiry and reasoning

The following courses are part of the program that has SLOs being mapped to each PLO. They can be found in CurriQunet.

Mathematics 066 – Calculus I Late Transcendentals for STEM

Mathematics 067 – Calculus II Late Transcendentals for STEM

Mathematics 070 – Discrete Mathematics

Mathematics 071 – Calculus I with Analytic Geometry

Mathematics 072 – Calculus II with Analytic Geometry

Mathematics 073 – Multivariable Calculus

Mathematics 078 – Differential Equations

Mathematics 079 – Linear Algebra

All the courses in the program satisfy the GE requirement (CSU and IGETC). Every PLO has been mapped to at least one of the ILOs (see above). Also, due to the CurriQunet set up, each core course in the program has all SLOs being mapped into each PLO.

The AS-T Program in Mathematics was created in 2011, and just updated recently in 2020. New courses MATH 066, MATH 067, and MATH 070 currently added to the program. The program is currently in review due to the change of courses. Since the last program review, it has attracted a decent number of students to join the program, and the number of students in the program has increased significantly.

Program of Study	F 2015	F 2016	F2017	F 2018	F 2019	F 2020	F 2021
Math AS-T CSU	12	20	42	63	92	144	135
Math AS-T IGETC	2	2	7	17	25	49	45
Grand Total	**14**	**22**	**49**	**80**	**117**	**193**	**180**

As the data shown, the program has more students each year in the last six years, except last year due to a pandemic. The number of students completing the program also increases overall (http://datamart.cccco.edu/ (http://datamart.cccco.edu/)). It definitely can be better, and on the positive sign, more students have completed degrees currently compared to previous years (again 2020-2021 is the pandemic time).

Program Awards	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
AS-T Math	11	27	36	29	50	32

We do believe that this number will continue increasing each year in the near future, since we have many qualified math students who are willing to become math tutors in the Math and Science Resource Center.

The department has been offering honor student projects in some of our MATH 073, and MATH 078, and MATH 079. After students complete the honor courses, their projects are presented at the Student Mathematics Conference in Northern California sponsored by Mathematics Association of America. However, this program is not offered anymore since Dr. Chungwu Ho, a qualified faculty in charge of this, retired.

For the program SLO's assessment, its matrix (Fall 2015 – Spring 2019) may be found at the link: http://www.evc.edu/discover-evc/slos (http://www.evc.edu/discover-evc/slos). The assessment was not conducted in the last two year due to COVID 19. Starting this Fall 2021, the results for the PLOs assessment

will be posted via CurriQunet, and the cycle for the assessment is two years, and we will close the loop for the assessment.

The tools we usually used to assess were questions mostly from the tests throughout the semester, and/or the final test. Although students are required to finish 60 units for the completion of the program, only the core math courses such as MATH 071, MATH 72, MATH 073, MATH 078, and MATH 079 have been assessed (MATH 066 and MATH 067 were not created at that time). For SLOs #1 and #2, the results somewhat are acceptable. The success rates for all the core courses in these SLOs are 70% or better. While we plan not to change anything academically in the future, we will continue our efforts to see if better results can be approached. The only concern is that we need to get all faculty involved in order to get all data collected to reflect our true intention. For the SLO#3, the result was not as our expectation due to the nature of difficult type of questions. The department plans to discuss this issue in the next meetings to see if MATH 071, MATH 072, and MATH 073 need to set aside an entire week to practice proofs and to review some logic from high school geometry.

- **2. Since your last program review, summarize SLO assessment activities and results at the course and program level. Please include dialogue regarding SLO Assessment results with division/department/college colleagues and/or GE areas. Provide evidence of the dialogue (i.e. department meeting minutes or division meeting minutes, etc.) Your program review will not be approved unless every SLO for every course in your program, and every PLO (if your program has a degree or certificate) is complete and approved by EVC's SLO Coordinator. All SLOs and PLOs must be assessed every two years.**

A summary of SLO assessment activity and results at the course and program level from Fall 2015 to Fall 2021, are listed below. Evidence of dialogue regarding SLO assessment results with division/department/college colleagues and/or GE areas, can be found in the divisional T-Drive file under Math Program Review.

Please see attached files for individual course SLOs and PLOs.

- **3. What plans for improvement have been implemented to your courses or program as a result of SLO assessment? Please share one or two success stories about the impacts of SLO assessment on student learning.**

Plans for improvement that have been implemented into your courses or program as a result of SLO assessment include the following:

- Provide students with more examples in the form of homework and review worksheets for better comprehension.
- Encourage students to collaborate in groups for increased learning and understanding.
- Emphasize the importance of defining variables when setting-up problems and the order of operations when simplifying and solving.
- Increase time devoted to certain SLO’s through lectures, discussions, and group work, and more quizzes.
- Motivate students to attend class regularly and on time, and encourage students to attend in-person and online tutoring.
- Have instructors assess the same or very similar SLO problems/questions in each course.
- Hire an additional math instructor.
- MATH 071, MATH 072, and MATH 073 are offered every semester with multiple sections. We need to ensure that all course syllabi have the same course objectives and current SLOs starting in Spring

2022.

- Since some SLOs cover a lot of different topics, it will be more accurate and more effective if all of these sections for each math class are assessed with the same questions or at least same type of questions on the tests. We just need to make this consistent for all other math courses in the future.

  • MAPLE has been installed in the computer lab in MS3. However, it becomes inaccessible to math students and faculty. Prior to 2016, the Mathematics Department had at its disposal a computer lab equipped with mathematical and learning software that was accessible to Mathematics students and faculty. In 2016, when the department moved from Acacia to MS3, it was initially provided with a computer lab, but this lab was subsequently used for Computer Science classes and became inaccessible to Mathematics students and faculty. A computer lab for the Mathematics Department is a necessity, as it will provide unique opportunities for instruction and collaboration, promote equity, and prepare students for a workplace that is increasingly technological. The Mathematics Department currently needs 50 laptops equipped with Maple and Minitab for use in the classroom.

  • As many schools now offer online/hybrid courses in Mathematics for the higher level courses, our department has discussed this matter. We did have a chance to offer the courses only synchronously during the pandemic time (Spring 2020 to Summer 2021). We will look at the data to see the student success rates before making a final decision to offer it online, or at least some math courses should be offered hybrids. This might help students to finish the program faster, so that the number of students completing the program will increase.

  • Indirect Assessment for the AS-T in Mathematics needs to be implemented soon to gather more information about the quality of student learning and to ensure the program's success.

Two success stories about the impact of SLO assessment on student learning are listed below.

1. Phan Le first took my MATH 072 – Calculus II in Spring 2016 and finished MATH 073 – Calculus III in Fall 2016. I was impressed with his academic potential. He did really well in two courses he took with me. Out of almost 50 students I had for each course, he appeared to be the top student. He had exceptional work habits. Even though he had a very strong background and seemed to know the material well, he never missed any class, and his records for both were outstanding. His work was well organized, punctual, and notable, and mistakes were almost nowhere to be found. I noticed that Phan was working in the Math and Science Resource Center as a tutor for more than one subject. My observation of Phan in class left me with the impression that he could work easily with others, to help others to master the concepts needed. I strongly believe that he is a talented and hardworking tutor who can share his knowledge to benefit the greater part of other students. He showed a student with passion not just in Math but in long term education in general. He went and looked for further academic achievement that would support his future goal. Additionally, Phan participated in the nationwide AMATYC Math Contest. He not only attended every semester in two years at EVC, he also earned a very good score each time. He was even in the top five of the contests. He then later transferred to University of California, Berkeley, to pursue a computer science major. He graduated last year 2020. He is now working at SUSE Company as a software engineer.

2. In Fall 2017, X took my MATH 072. He then continued taking MATH 073 and MATH 079 with me in the following year, 2018. X has been doing well in all of my math classes. He received an A on his first Calculus course with me easily. It wouldn’t surprise me if he was as good as other students. To be honest, it was not the best A that I have seen, but what I found in him is really special and unique in which I have never seen in any student in my 20 years of teaching experience. I remember when he took my first exam in my Calculus III in the next semester, he barely passed it. However, when he asked me if I could possibly write him a letter of recommendation later for his application, I promptly agreed, even though my policy of writing this letter is for students getting a grade of A’s only. I had a chance to

talk to him a few times, and he shared with me some difficulties and depression that he had been dealing with. Listening to him at that time, I didn't know that he was struggling with autism spectrum disorder, which contributed to his depression sometimes back then. Nevertheless, amazingly, he came back and earned all good grades for the rest of the semester. At the end of his MATH 073, he managed to earn a strong B in my class. B is a good grade, but I do believe that he could do better than that. In fact, his loss in A was due to his missing homework assignments. He later shared with me many things that he was interested in. He loves math and uses it to program. He has been working with different projects, such as setting up a VPN at home and creating an SSH tunnel to connect to his VPN at home to get free Wi-Fi on airplanes by utilizing an open TCP port or running a Minecraft server. He is just a very curious student who is naturally able to figure out all things by himself, and who has the greatest skills at understanding abstract concepts and connecting them to the real world.

From the SLO assessment results, below are a few changes that were implemented to help students to improve and be successful.

• Assigned homework, extra credit/challenge problems and projects that help develop and improve their critical thinking skills while simultaneously assisting them to master the subjects so that they can apply the learning concept to solve real world problems.

• Provided additional group activities and collaboration time, to help students to develop and improve mathematical skills, including communication and reasoning.

Faculty and Staff

Part D: Faculty and Staff

- **1. List current faculty and staff members in the program, areas of expertise, and describe how their positions contribute to the success of the program.**

  PART D: Faculty and Staff

  1. List current faculty and staff members in the program, areas of expertise, and how positions contribute to the program success.

  A. List of Faculty and Staff Members in the Program

  1. Faculty Members

  Burnham, Cynthia R

  Quach, Tin

  Ky, Teck

  Lombard, Bob

  Knight, Robert W

  Cong-Huyen, Laimi

  Vanniasegaram, Sithparran

  Erickson, Shanna

  Anderson, Sylvia

  2. Staff Members

Pham, Duyen (Bryan)

Nguyen, Nguyet

Marks, Sawanii

Vallin, Jorge

B. Areas of expertise, and how positions contribute to the program success

1. Faculty Members

Burnham, Cynthia R

She teaches online, hybrid and face-to-face courses. She has integrated online learning resources into all her courses to further support student learning and investigated various teaching methodologies with considerations such as student engagement and low-cost materials to improve access. She wrote the curriculum for a new math course, Discrete Mathematics, and offered this class face-to-face in Spring 2021 and will offer it as an online course in Spring 2022. She has also developed online courses in MATH 021, MATH 025, MATH 062, and MATH 063. All her online courses are fully integrated with Canvas and incorporate the latest standards for online teaching. She is lead SLO instructor for MATH 062 and MATH 070. She won the League for Innovation in the Community College Innovation of the Year Award in Spring 2017 for her work developing the Enlace Accelerated Program. She has completed EDIT 022 and attended professional development conferences and workshops, such as OTC, ICTCM, CMC3, and various webinars. She will continue her professional growth through classes and conferences and will continue to develop and innovate online courses.

Quach, Tin

Area of Expertise:

Applied Mathematics

How Does His Position Contribute to Program Success? Professor Quach has taught most of the mathematics courses offered at a community college level. When teaching advanced math courses such as Calculus and Differential Equations, he regularly uses technology (graphing calculator, computer algebra system, etc.) during the lectures. He worked with other math faculty to update the course outlines and has also given graphing calculator workshops for advanced math students.

Professional Development in the Past Six Years: He has regularly attended CMC3 conferences and workshops providing training in the area of using technologies and teaching mathematics to improve his teaching skills. He always volunteers to conduct peer evaluations every semester.

Proposed Professional Development Activities and Reason for Such Activities: Professor Quach plans to attend workshops and conferences with emphases on teaching mathematics, using technologies, improving student success, etc. He will continue to volunteer to conduct peer evaluations and serve on college committee(s).

Ky, Teck

Your name: Teck Chhon Ky

Your area of expertise:

His area of expertise in mathematics is in Statistics. He received a master's degree in Statistics and a bachelor's degree in Mathematics. His master's Degree in Statistics has afforded him a background in advanced statistics and mathematics. This has afforded him the knowledge to develop effective courses in

statistics and mathematics for community college students. His knowledge will also expand our student's insight and understanding of the role statistics and mathematics have in their careers in business, medicine, social sciences and all their future studies.

How does your position contribute to the success of our program?

As a faculty member, his major contribution to the success of our program is to maintain a high retention rate for students taking Precalculus, Calculus, and Statistics courses. His articulation with high school students during summer school has been enjoyable. He has had the opportunity to work with students from the EXCEL PROGRAM in Precalculus, Calculus, and Statistics. In less than two years, he has experienced some of these students taking MATH 071, MATH 072, MATH 066, MATH 067, and MATH 063.

He would like to assist in expanding our statistics program to meet the demands of our universities, corporations, businesses, and community.

List your professional development activities in the past six years.

In the last six years, he has been a part of the coordinating committee for the ASPIRE Program at EVC. This program focuses on the culturally specific needs of Asian, Pacific Islander and East Indian students. He has assisted in the hiring process of three new faculty members for the department of mathematics and one for the department of psychology.

He has written solution manuals with Professor Soler from De Anza College for one of the elementary textbooks.

Proposed professional development activities and reasons for such activities.

He would like to serve on the hiring committee in our department in the future. He believes that his tenure at Evergreen since 1995 has afforded him the opportunity to know and understand the diversity and complexity of our student population. This understanding has allowed him to develop different teaching styles and integrate cultural differences and similarities that are relational to our students we serve. He believes that his experience will be an asset in hiring the right professor for our students.

He will continue to provide workshops for the Nursing Department students to improve their TEAS (Test of Essential Academic Skills) scores in the quantitative section. The workshop will assist the nursing students with passing the TEAS.

He is a member of the PI MU EPSILON and the AMERICAN STATISTICAL ASSOCIATION. He is an avid reader of these journals and finds useful examples to use in the classroom. This continues to help to make his lectures more interesting in the classroom.

Lombard, Bob

Area of Expertise:

Professor Lombard's expertise lies in developmental mathematics, precalculus algebra and trigonometry, and applied mathematics (with extensive work in differential equations). He used to teach most of his load in developmental mathematics every semester and was considered a lead instructor in MATH 310 (Basic Mathematics) & MATH 311 (Prealgebra). Since AB 705 and the elimination of all developmental courses (except for MATH 013 – Intermediate Algebra), he is now the lead instructor for both MATH 022 (Trigonometry) and MATH 025 (Precalculus Algebra and Trigonometry). He has worked with both full-time and part-time faculty in both courses in the development and assessment of SLO's for the last four years here at EVC. Working on SLO's collaboratively with other department members ties into Strategic Initiative 3: Organizational Transformation. It helps to transform the college's image via (a). Student Access: Completion of Educational Goals, (b) Employee Development, and (c) Transparent Infrastructure. He also possesses a 'fair' amount of knowledge on the subject of differential equations and is an available resource for students who take these courses in our department; over the past four years, there have been instances where students from this course have sought him out in our Math and Science Resource Center (MSRC) to help them with this class. He can easily teach this course upon request or if needed. He taught this course, at the math department's request, in Fall 2017 at Solano College.

How Does His Position Contribute to the Program Success?

Given that most of the course offerings in our department rely on developmental mathematical foundations, it is essential that our math department has some members who have an emphasis on developmental mathematics. Helping other instructors with course information and counseling students on the next mathematics course they should take is just a couple of the important responsibilities which he welcomes every day. Professor Lombard is one of those full-time math faculty members who meet this important need for having expertise in developmental mathematics in our department. He has also been a lead instructor in the development of SLO's and updating of the Precalculus series course outlines, for the last four years.

Professional Development in the Last Six Years:

As part of the district mission statement, student success is the heart of its mission, and the district has aspired to hire the best and brightest faculty to ensure that our students are well prepared after leaving our institution. Since learning is a lifelong endeavor and instructors need to maintain currency in their field, he has chosen to be a member of two professional math organizations: (1) The California Mathematical Council for Community Colleges (CMC3) and (2) The American Mathematical Association of Two-Year Colleges (AMATYC). He usually attends the yearly conference every December in Monterey, California for CMC3 and subscribes to mathematical journals from AMATYC.

Proposed Professional Development Activities and Reason for such Activities:

Professor Lombard loves to interact with students every day; that is why he has chosen teaching as a profession. This is the beginning of his twenty-second year teaching full time at EVC. He plans on teaching here for an additional eight years. But teaching requires a lot of time interacting with Evergreen Valley College Mathematics Program Review Self-Study Document, 2014 Page 60 students, which he obviously immensely enjoys. In the future, he is considering taking a year long sabbatical in the second half of his tenure here at EVC. This would allow him to focus on several aspects of professional development, outside of the classroom, but still focus on helping students inside the classroom.

Knight, Robert W.

Dr. Robert Knight's area of expertise involves the use of technology in the teaching of mathematics. Dr. Knight is an expert in the use of many Learning Management Systems (LMS's) including Canvas and the LMS's created by various textbook publishers like Pearson Education, etc. Dr. Knight has also designed and produced his own LMS called MyClassText which uses free Open Educational Resource textbooks from OpenStax publishing to teach Statistics, thus eliminating the cost of textbooks and publisher-based educational software for his students.

Dr. Knight's contribution to the mathematics program moving forward will be to continue to research and report on the developments in both educational software and hardware as it relates to the teaching of college mathematics.

Cong-Huyen, Laimi

Area of Expertise:

Upper-level mathematics - Calculus and above

How Does Her Position Contribute to Program Success?

In the past six years, Professor Cong-Huyen has taught many different Math courses, from developmental courses to upper-level math courses. As part of our college mission, in order to well prepare our transferred students, in the upper-level courses, she has been helping her students to enhance the learning objectives of each class, and to connect academic learning and community. As a result, she was recognized by University of California, Irvine for dedication to helping students establish a strong personal and academic foundation and having the most significant impact on students' academic performance and successful transfer to the university. Currently, she is the lead instructor for MATH 073, and MATH 079, where she keeps the courses updated and met all CSUs and UCs requirements and conducts the assessments as part of the college accreditation. She also developed MATH 021L - Precalculus Support – to provide just in time instruction for students for additional academic support due to the new Assembly Bill No. 705. Additionally, she is in charge of the AS-T Program in Math since it was first created in 2011 and continues to update the program and coordinates the assessment for all higher level of Math courses to provide quality and efficient program to ensure student success.

Professional Development in the Last Six Years:

Professor Cong-Huyen has participated in the *CMC3* conference almost every year (except the last two years due to the pandemic). There, she attended different workshops, such as "Understanding Black Holes with Elementary Calculus", "Mathematical Reasoning and Proofs", and "An Investigation of Elliptic Curves: Symmetries, String-Theoretic E8, and Cryptography", since her focus area is the high end of lower division math courses. She also participated in several workshops for student services, such as CurriQunet and Canvas. She obtained the certificate for online teaching in order to offer different teaching modalities to students. Professor Cong-Huyen has been a member of the All College Curriculum Committee for almost 10 years. She represents the MSE Division on the committee, where we can help to review, approve, or make changes to the curriculum of the college for a better program for students. She also serves as a chair of the division curriculum committee, where she can assist all disciplines in the division to review the courses and programs.

Vanniasegaram, Sithparran

Areas of Expertise

Professor Vanniasegaram's areas of expertise are mathematics and statistics. In his mathematics and statistics classes, he uses a wide range of teaching strategies (lectures, group work, hands-on demonstrations, etc.) so that students from diverse backgrounds can be successful in his classes. This approach is consistent with the EVC Mission Statement. He tries to maintain high standards in his classes so that his students are well-prepared when they transfer or when they enter the workforce. This approach is also consistent with the District Mission Statement.

How Does His Position Contribute to the Program Success?

Professor Vanniasegaram has made the following "long-term" contributions to the department in the area of statistics: he taught at least two sections of MATH 063 during his first twelve "regular" semesters at EVC (including four during his first semester), has taught MATH 063 every Intersession since 2016, has evaluated three adjunct MATH 063 instructors, and has lead MATH 063 SLO assessment since Fall 2014. He was invited to speak to the entire college about his "closing the loop" MATH 063 SLO work during the Spring 2015 PDD.

Additionally, he helped select the department's current statistics textbook, recently selected five other options for statistics textbooks, updated the MATH 063 course-outline, contributed to a statistics textbook, started a statistics working group, led the department's Statway efforts (writing course outlines, attending training and meetings, etc.), wrote the MATH 063X course outline, and taught the first-ever MATH 063X course offered at EVC.

Aside from statistics, he has helped the department in other ways. He has taught integral calculus and multivariable calculus on a regular basis since Fall 2018, served on the ENLACE Math full-time faculty screening committee, served as the main department meeting minutes taker for eight semesters, has prepared students for the AMATYC (American Mathematical Association of Two-Year Colleges) contest since Spring 2015, evaluated seven non-MATH 063 adjunct instructors, and led MATH 072 SLO assessment since Fall 2016.

He contributed to the department's AB 705 efforts by working on MATH 063X, representing the department at four SJECCD AB 705 meetings/retreats during the 2018 calendar year, participating in AB 705 MATH/AB 705 Taskforce meetings during the Spring 2019 semester, and providing AB 705 email updates approximately every three weeks over three years (49 in total).

Professional Development in the Last Six Years

Because of COVID-19 and the subsequent campus closure, all instructors were forced to teach remotely/online. Fortunately, Professor Vanniasegaram received a lot of training in this area. He took EDIT 022 during Summer 2016 with Professor Nasreen Rahim. This qualifies him to teach online courses at EVC now that the college has returned to face-to-face classes. He also participated in an eight-hour OEI Course Design Rubric workshop during the Fall 2015 semester, learned Zoom teaching strategies from Celso Batalha and Mike Masuda during the Spring 2020 semester, and received additional Canvas training through De Anza College during Spring 2020.

He attended the CMC^3 Conference via Zoom last fall and attended the conference in-person during his first four years at EVC. He has participated in three three-day California Acceleration Project workshops (June 2018, June 2019, February 2020) and attended six CCCCO Statistics Institute meetings during Fall 2020, Spring 2021, and Fall 2021 (2 each semester). Finally, he received training in Statway (Summer 2017, Summer 2019), CRM Advise (Fall 2019), Multiple Measures (Fall 2016), 508 Compliance (Fall 2018), and Guided Pathways (Fall 2017).

Proposed Professional Development Activities and Reason for Such Activities

Professor Vanniasegaram will continue to attend the CMC^3 Conference in the future. He hopes to learn new teaching strategies from faculty members at other colleges to help improve the retention and success rate in

his classes. He also plans on expanding on his statistics teaching techniques by attending more CCCCO Statistics Institutes in the future. Finally, he has never attended the AMATYC Conference and would like to do that at least once in the next six years.

Shanna Erickson

Area of Expertise:

Developmental math and statistics

How Does Her Position Contribute to Program Success?

Since being hired in Fall 2015, Shanna Erickson has taught a variety of math courses (MATH 310, MATH 111, MATH 013, MATH 016, MATH 021, MATH 021L, MATH 022, MATH 063, MATH 063X). She was previously the lead instructor for MATH 111 and is currently the lead instructor for MATH 013. Many of her classes that she teaches are for the ENLACE program, which emphasizes student empowerment and improving student retention, success, and transfer. She also offers an annual pre-statistics math academy during the Summer to help prepare students for MATH 063. In the past, Professor Erickson consistently taught MATH 310, MATH 111, MATH 013, and MATH 063 every semester to support students who have previously struggled with math. With new restrictions on developmental courses stemming from AB 705 requirements, she now teaches MATH 063 and MATH 063X every semester and MATH 013 every Fall. She also teaches MATH 021 in the Spring to provide a STEM path for students in the ENLACE program. She has helped provide extra support to students in teaching MATH 063X Statistics Support sections as well as MATH 021L Precalculus Support. In addition, she helped pilot a new course, MATH 016, designed to provide students with a complete algebra and geometry background in one semester. She was also on the textbook selection committee for this course. She took EDIT 022 in Spring 2019 and started offering both synchronous and asynchronous courses in Spring 2020. Professor Erickson also makes use of OER textbooks, free online homework systems (MyOpenMath), and free graphing calculator software in most of her classes to reduce student financial burden. Professor Erickson uses technology in the classroom to better serve her students (e.g., digital whiteboard notes that can be saved and provided to students as a resource, lecture recordings, online homework). This helps support students both inside and outside the classroom. This use of technology greatly aided her transition to online teaching that became necessary during the recent pandemic (starting Spring 2020). Professor Erickson currently serves as the Math department coordinator (starting Fall 2021). This position includes department organizational tasks, campus liaison, such as class scheduling, textbook ordering, and meeting moderation. She also maintains the department course sequence chart and regularly shares this and other updates with counseling.

Professional Development in the Last Six Years:

Professor Erickson has attended CMC^3 three times in the past 6 years, as well as the International Conference on Education (ICOE) in Winter 2019. The International Conference on Education annual conference grants academics and professionals in Education and related fields from around the world to meet and share ideas. The event is cross-disciplinary, allowing attendees to meet and interact with those outside their own levels and disciplines. In 2018, Professor Erickson joined the Safety and Facilities Committee at EVC for a semester. She is also a current member of the AB 705 taskforce and STEM Council and provides department updates to the division, campus, and district as needed. In Spring 2020, she was part of an early transition team at the time that it was becoming increasingly apparent that schools would have to close their campuses during the pandemic. She was able to transition her classes to online-only before most of the district and was able to provide feedback regarding this process. Professor Erickson is currently the advisor for SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science). This group’s annual conference was unfortunately derailed in Spring 2020 because of the state and county mandated lock-down measures. In previous years, the group organized and hosted a conference for local

high school students. At the conference, high school students participate in academic and career workshops, and attend talks from leaders in science from the community. However, in Fall 2020, she was able to organize an event for SACNAS in collaboration with the Stanford Linear Accelerator Center (SLAC). The event, held virtually on October 30, 2020, allowed SACNAS students to tour the lab and hear from some of the scientists and other staff at the facility.

Sylvia Anderson

Area of Expertise

Developmental Math, Statistics, and Calculus.

How position contributes to the program's success

Professor Anderson has taught a wide range of courses offered at EVC. Several of the courses are through the Umoja-AFFIRM program, which focuses on helping students be successful academically and in transferring to a four-year university. She has taught in several modalities, both in-person and online. In addition, she embeds technology, such as, MyMath Lab, MyLab Statistics, Excel, and graphing calculators, into most of her courses. She also conducts review sessions after class to help students prepare for upcoming exams or to review previous coursework.

Professional Development

Professionally, she has attended numerous conferences including: CMC^3, JMM (Joint Mathematics Meetings) hosted by AMS and MAA, CAP, T3IC through Texas Instruments, and USCOTS (United States Conference on Teaching Statistics). In addition, she has completed courses related to online learning and instruction.

She will continue to attend conferences, take courses, and conduct review sessions, as an ongoing means of staying updated and aiding students in mathematics instruction.

2. Staff

Pham, Duyen (Bryan)

Mr. Pham is an Instructional Support Program Coordinator. He oversees and coordinates the daily operations of the EVC's Math and Science Resource Center (MSRC), which provides efficient math tutoring and other essential student learning services to ensure student success for all Evergreen Valley College math and science students. He works closely with the Dean of Math, Science, and Engineering division on coordinating the work of MSRC instructional support staff and faculty tutors. He also works with the Campus Academic Skills and Tutoring Instructor on the hiring, mentoring, supervising, and evaluating of all MSRC student tutors. Mr. Pham works to develop SAOs (Service Area Outcomes) for the MSRC and for an overall best tutoring experience for EVC's math and science students.

Nguyen, Nguyet

Ms. Nguyen is a Mathematics Instructional Support Assistant. She provides students and student tutors with guidance, support and tutoring assistance. In the future, she plans to attend workshops offered by the district to improve her skills for working with students.

Marks, Sawanii

Ms. Marks is a Mathematics Instructional Support Assistant. She provides students and student tutors with guidance, support, and tutoring assistance. Her area of expertise is in the interrelationship between the tutors and students. As for her professional developments, she was trained and worked with MyMathLab, and she participated in EdFund's Training Workshop, "Creating Outstanding Customer Service Success."

Vallin, Jorge

Mr. Vallin is a Mathematics Instructional Support Assistant. He provides students and student tutors with guidance, support and tutoring assistance. Jorge is a team player who works closely with the ENLACE instructors. His excellent communication skills with both English and Spanish contribute to being a successful instructional assistant. The bilingual ability provides for challenging math concepts to be explained in the language that students bring with them to EVC. The examples he uses to illustrate the math concepts are culturally relevant and as a result, students are highly engaged.

- **2. In addition to major professional development activities completed by faculty and staff in the past, in particular with regards to students' success, equity, distance education, SLO assessment, guided pathways and/or innovative teaching/learning strategies, are there any additional professional development needs of your department in the future? What are they? Please provide details about a timeline.**

A. Summary of Faculty Activities and How These Activities Contribute to the School Mission: In addition to their regular teaching and committee work, faculty members have engaged in a variety of activities that enhance their teaching and service to the students.

a. Activities that Help Serve the Students: To ensure we offer a quality and efficient program, as described in the Strategic Initiatives of the Program Review Self-Study, all the faculty participated in various training sections of SLO assessments in 2012, and in the past two years, have been actively working in the SLO assessment in each of their classes by submitting an assessment of two or three SLO's of each of their classes. Many faculty members have also actively been participating in various student programs such as ENLACE, EXCEL, ASPIRE, Umoja-AFFIRM and the EVC Honors Program to ensure we meet the school mission of empowering and preparing students from diverse backgrounds to succeed academically. An additional proposed future resource where our mathematics department can contribute to help serve our students better is to offer additional lab hours in the Math and Science Resource Center (MSRC) on the weekends and during intersession.

b. Activities that Enhance Faculty's Knowledge: The quality of a program depends directly on the depth and the scope of the knowledge of its teaching staff. A few full-time and adjunct faculty members in the Department of Mathematics hold doctoral degrees. Many other faculty members have taken additional graduate level courses or have been attending various workshops by @One Institute or elsewhere. Most of the faculty members are also members of professional organizations, such as CMC3, AMATYC, MAA, and AMS. These faculty members participate in professional conferences and subscribe to professional journals to ensure that they have ample knowledge to carry out a quality program.

c. Keeping Abreast with New Technologies and Current Educational Findings: To keep abreast with new technologies and educational findings, math faculty members have been actively participating in many professional conferences such as the ones offered by CMC3, AMATYC, MAA, as well as OnCourse Workshops. The department now offers several online courses, and many classes now have an online component, such as Moodle or MyMathLab. To meet students of diverse backgrounds, a few faculty are very active in participating in conferences and workshops such as SACNAS, STEM, WebAssign, and CurriQunet.

B. Summary of Staff Activities and Their Significance. The Mathematics Instructional Support Assistants are valuable assets to the Evergreen Valley College Mathematics department. In accordance with the district mission and strategic initiatives, the Mathematics Instructional Assistants are doing a great job providing an efficient mathematics tutoring program and essential student learning services to ensure student success. Besides providing tutoring to students, they also supervise, train, support, and evaluate student and volunteer tutors. The Instructional Assistants are also going to developmental math classrooms to serve as Teacher Assistants. Overall, with their focus on supporting a student-centered environment, the Mathematics Instructional Support Assistants are doing a formidable job serving as bridges between math students and mathematics instructors. They play a very important role in student retention and student success in the Evergreen Valley College Mathematics department. Evergreen Valley College Mathematics Program Review Self-Study Document, 2014 Page 63. Some additional activities where staff, math instructional assistants

working in the Math and Science Resource Center (MSRC), could contribute to future staff development is to continue to attend staff development workshops at the college's PPD, as well as attending classes to refresh their mathematical skills.

The department is challenged by the maintenance and improvement (professional development) of full-time faculty, as well as staff and administrative levels to support instructional needs and student support services and keep abreast with recent retirements. Indeed, to sustain current levels of service, the college must commit to a staffing plan, linked to resource allocation, which analyzes human resource needs based upon the size, scope, and changing needs (demographic shifts and gender gaps) of the department: it is then a good idea, for the mathematics department, guided by more extensive student data and by the college and district educational master plans, to assess and analyze the level and diversity of its full-time faculty and staff. The mathematics department and the college could then use the results of that assessment to develop, adopt, fund, and implement long-range staffing that will ensure enough qualified and diverse fulltime faculty, part time faculty and staff (including tutors) to foster an equitable and inclusive environment for all students and assure the quality of the program. Gender gaps in full-time faculty and in STEM courses need to be addressed promptly.

Budget Planning

Part E: Budget Planning

- **1. With your Dean, review the department Fund 10 budget (operational budget) and discuss the adequacy of the budget in meeting the program's needs.**

The 2021-2022 operational budget for conference, travel and training is $150, but these funds are transferred to Fund 17. The operational budget for equipment is $0.00.

Mathematics (1700)

GL Account	Description	Budget
10-21-1700-00000-55200	Mathematics : Conference\Travel\Training	$150.00
10-25-1700-00000-56411	Mathematics : Equipment ($200 to $4,999)	$0.00
17-21-1700-22500-54100	Mathematics : Supplies Instruction	$350.00

The actual budget is nonexistent, as the $150 in Fund 10 is transferred to Fund 17 for MSRC needs. Consequently, there is no budget for basic department needs such as lab and testing space, polar graph paper, graphing paper, quality markers, paper refills, staplers in every classroom, a class set of graphing calculators, and tablets or computers for instruction use.

- **2. List all external funds, i.e. fund 17, the department/program receives, and describe their primary use.**

The Fund 17 allocation is $350 and can only be spent on instructional supplies. If grants or external funding become available, they are posted under this fund.

Technology and Equipment

Part F: Technology and Equipment

- **Review the current department technology and equipment needed and assess program adequacy. List and changes to technology or equipment since the last program review. If changes were made please indicate how the change impacted student success.**

  Prior to 2016, the Mathematics Department had at its disposal a computer lab equipped with mathematical and learning software. In 2016, when the department moved from Acacia to MS3, it was initially provided with a computer lab, but this lab was subsequently used for Computer Science classes and became inaccessible to Mathematics students and faculty.

1. There is an immediate need for one or two computer labs for the Mathematics Department. Computer labs are indispensable for providing unique opportunities for instruction and collaboration, promoting equity and preparing students for a technological workplace.

2. The department needs a testing center for online courses with well-trained personnel to run it, especially when we propose to have online/hybrid math courses for the AS-T degree.

3. There is an immediate need for 100 laptops equipped with Maple and Minitab for use in the classroom.

4. There is an immediate need for a class set of graphing calculators (minimum 150).

5. In addition, laptops and tablets are needed for faculty to use as teaching tools in lectures.

Additional Information

Part G: Additional Information

- **Please provide any other pertinent information about the program that these questions did not give you an opportunity to answer.**

  Over three years ago (https://assessment.cccco.edu/ab-705-implementation), then California Governor Jerry Brown signed AB 705 (a legislative bill) (https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB705). AB 705 has had a significant impact on Math and English departments in community colleges across the state of California. Two months after the bill went into effect, the SJECCD held its first meeting (https://sjeccd.sharepoint.com/leadership-resource-documents/Shared%20Documents/03-14-2018%20Leadership%20Meeting%20Documents/03-14-2018_LeadershipMeetingNotes.pdf) to address AB 705. Since then, the EVC Math Department has worked very hard over the last three and a half years to comply with AB 705. In this part of the program review, the department's AB 705 work and achievements will be discussed.

  I. One Year (Two-Semester) Pathways

  AB 705 imposes several requirements. One of those requirements is that colleges must "maximize the probability that the student will enter and complete transfer-level coursework in English and Math within a one-year timeframe". In response to this part of the bill, the Math department started discussing possible one-year

pathways during the Spring 2018 semester that would take students from Math courses that were two levels below transfer to and through transfer-level courses.

At the state level, the ASCCC (Academic Senate for California Community Colleges) suggested having non-STEM and STEM pathways (https://www.ocf.berkeley.edu/~parran/flowchart.pdf). The first course in each of these two pathways is a “large” algebra course. The ASCCC pathways were two of the initial four options that the department discussed. The other two pathways were Statway (a two-semester statistics course with algebra learned as needed) and the accelerated ENLACE model (MATH 111 and MATH 013 in the first semester, MATH 063 in the second semester).

It was later learned at an ASCCC meeting at San Jose City College that the accelerated ENLACE model would not qualify as a one-year pathway since the model counted as three semesters with regard to AB 705. The department then decided during the Fall 2018 semester not to offer the ASCCC non-STEM pathway (Statpath) so there were two pathways left: (1) Statway and (2) the ASCCC STEM pathway. For the ASCCC STEM pathway, Professor Laimi Cong-Huyen wrote the course outline for MATH 016 (a 7-unit course that combined the fundamentals of MATH 111, MATH 013, and MATH 014).

The administration/department decided to offer five sections of MATH 016 and two sections of MATH 064 during the Fall 2019 semester. The two courses suffered from low enrollment: both MATH 064 sections were canceled and three of the five MATH 016 sections were canceled. Two more sections of MATH 016 were offered during the Spring 2020 semester and both were canceled due to limited enrollment. The District decided during January 2020 to limit the number of pre-transfer-level courses offered so MATH 016 and MATH 064/MATH 065 were discontinued.

II. Co-Requisite Courses

The department’s first curriculum strategy in response to AB 705 was limited to two-semester pathways and did not involve co-requisite courses. During the Spring 2019 semester, the majority of the California community college Math departments offered co-requisite courses. That semester, the Math department decided to follow suit and create and offer co-requisite Math courses. Professor Parran Vanniasegaram wrote the course outline for MATH 063X (the co-requisite for MATH 063) and Professor Laimi Cong-Huyen wrote the course outline for MATH 021L (the co-requisite for MATH 021) during Summer 2019.

It is stated in the AB 705 bill that “a community college or district may require students to enroll in additional concurrent support…….. during the same semester that they take a transfer-level English or mathematics course, but only if it is determined that the support will increase their likelihood of passing the transfer-level English or mathematics course.” The Math department decided not to require *any* student to take the co-requisite courses.

The Math department started offering MATH 063X during the Spring 2020 semester and MATH 021L during the Fall 2020 semester. Over 160 students enrolled in MATH 021L and over 120 students enrolled in MATH 063X during the Fall 2020 semester. Enrollment dropped for the two co-requisite courses during the Spring 2021 semester: 125 students signed up for MATH 021L and 85 students signed up for MATH 063X.

III. Placement

Another part of the AB 705 bill states that community colleges cannot require “students to enroll in remedial English or mathematics coursework that lengthens their time to complete a degree unless placement research that includes consideration of high school grade point average and coursework shows that those students are highly unlikely to succeed in transfer-level coursework in English and mathematics.” No such research was produced so developmental Math prerequisites were eliminated. Thus, any student can enroll into any of the entry-level transfer-level Math courses: MATH 022, MATH 061, MATH 063, MATH 021, MATH 022, and MATH 025. (Course outlines were changed by the lead instructors to incorporate this new placement rule.)

IV. Bootcamps/Supplemental Instruction

With fewer restrictions, less-prepared students are eligible to take the entry-level, transfer-level Math courses and some of them can use additional support. As mentioned in a previous section, co-requisite courses were developed with these students in mind. Additionally, short courses *before* the term were offered. Before AB 705 was enacted, ENLACE offered boot camps (taught by Professor Erickson) for students to review prerequisite material before taking their math course. With AB 705 in place, Professor Teck Ky started offering additional boot camps before the Fall 2018 semester. The boot camps were offered for a few semesters but because of limited funding, we stopped offering them in 2020. (As mentioned earlier in Part A of the Program Review, the department is hoping that the college will offer funding to restart the boot camps.)

In the past, embedded tutoring was offered at EVC in several classes. After AB 705, embedded tutoring transformed into supplemental instruction. Starting in Spring 2019, several MATH 063 and MATH 021 instructors incorporated supplemental instruction into their classes. Professors Sylvia Anderson and Vanniasegaram gathered information from these instructors about how they were using supplemental instruction and reported their findings to Professor William Nguyen. Professor Nguyen has led the supplemental instruction effort across campus.

V. Decrease in Developmental Math Sections

Since students could enroll directly into transfer-level courses, the department was forced to reduce the number of developmental Math courses it offered. During the Fall 2017 semester (https://www.evc.edu/StudentAffairs/Documents/2017-fall-schedule.pdf), the department offered a total of 57 developmental Math sections:

- seven sections of MATH 310 [three levels below transfer],
- eight sections of MATH 311 [three levels below transfer],
- sixteen sections of MATH 111 [two levels below transfer],
- twenty-two sections of MATH 013 [one level below transfer],
- and four sections of MATH 014 [one level below transfer].

The department deactivated MATH 310 during the Spring 2019 semester, but continued to offer MATH 311, MATH 111, MATH 013, and MATH 014. In spite of the fact that *all* students could enroll directly into transfer-level Math courses, all the developmental sections were filled during the Spring 2019 semester.

As mentioned earlier, the District expressed a preference in early 2020 that all stand-alone developmental Math sections be eliminated. In response to this request, MATH 311 was deactivated, MATH 111 and MATH 014 were no longer offered, and only four sections of MATH 013 were offered during Fall 2020. For its

efforts in reducing the number of stand-alone developmental sections (from 57 to 4 in a three-year time period), EVC was named “a Strong Implementer Math College” in Page 15 of this California Acceleration Project (CAP) report (https://accelerationproject.org/Portals/0/Documents/Still_Getting_There_Final.pdf).

Finally, in Spring 2022 it was decided that EVC would no longer offer any MATH 013 sections starting Summer 2022.

The Math department enrollment has declined significantly since 2019 (see Part A). While some of this decline can be attributed to the pandemic, part of the decline may also be due to the decrease in developmental Math sections.

VI. Communication

The aforementioned changes had to be communicated from the Math department to the rest of the college and to the general public. Professor Vanniasegaram started this communication in Spring 2018 when he discussed AB 705 and possible two-semester pathways at a Division meeting and at PDD. Professor Shanna Erickson later communicated the department’s plans at a SJECCD Board meeting two months later.

She also (along with other faculty members) presented the department’s AB 705 related plans at various Counseling Department meetings. Professor Vanniasegaram updated the District on the department’s work during two AB 705 retreats in 2018 as well as key EVC AB 705 employees during the Spring 2019 AB 705 Task Force Meetings. At the Fall 2019 PDD, several department members provided updates to the campus community.

To help students and counselors better understand the course changes, the department has had many discussions regarding their flow chart. Professor Erickson digitized the flow chart in Spring 2018 and has made several updates to it based on the department’s discussions.

VII. Professional Development

There are 114 colleges in the California Community College system and the AB 705 data and experiences from the colleges were shared at different statewide and Bay Area meetings. Faculty members from the department attended CAP workshops during June 2018, June 2019, and February 2020. They also attended the CMC^3 Conferences in December 2018 and December 2019, the ASCCC Curriculum Regional Meeting at Mission College in March 2019, and The Research and Planning Group for California Community Colleges meeting at De Anza College in April 2019.

As written earlier, new students are now entering the entry-level, transfer-level Math courses because of the AB 705 changes. At the CAP meetings, various teaching strategies and materials were shared to reach this group. During the Fall 2020, Spring 2021, and Fall 2021 semesters, the CCCCO (California Community Colleges Chancellor's Office) offered multiple Statistics Institute workshops. Professor Vanniasegaram attended seven of these workshops and shared the workshop materials with the department via email.

Future Needs and Resource Allocation Request

Based on the areas noted below, please indicate any unmet needs for the program to maintain or build over the next six years. Please provide rationale on how the request connects back to SLO/PLO assessment, strategic initiatives or student success. If no additional requests are needed in any of the areas, put N/A.

1. **Faculty Request**

   Ongoing Budget Needs
   More staff in the MSRC – Due to high demand and suggestions from students using the lab, evening and weekend tutoring hours for math and science are needed. In addition, the MSRC needs to provide tutoring services to math and science students during winter intersessions.

   One-Time Expenditure
   One full-time faculty position. Since the last program review, 3 full time faculty have retired or transferred, and we only rehired 2 new faculty. Our ratio of full-time to part-time faculty is too low, and we will have even more sections to fill due to reduced class sizes.

   Total Expenses (Staffing and Faculty Requests include Salary and Benefits)
   200000.000

   Request linked to SLO/PLO #
   PLO#1,2,3

   Total Cost
   200000.000

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving Student success rates
   Yes

   Achievement of program set standard for student success
   Yes

2. **Facilities**

   Ongoing Budget Needs
   Hardware/Software updates – Software and computers being used for in-class activities will need to be updated for compatibility with current operating system(s).

   One-Time Expenditure
   Two rooms with computers designated for math classes – The math department offers advanced math courses (Calculus, Linear Algebra, and Differential Equations) and Statistics which students use softwares such as Excel, Maple, Matlab, Minitab, etc. for in-class activities. The department needs a testing center for online courses with well-trained personnel to run it, especially when we propose to have online/hybrid math courses for the AS-T degree.

   Request linked to SLO/PLO #
   PLO #1,2,3

   Total Cost

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving Student success rates
   Yes

   Achievement of program set standard for student success
   Yes

3. **Technology**

Ongoing Budget Needs
Hardware/Software updates – Software and computers being used for in-class activities will need to be updated for compatibility with current operating system(s).

One-Time Expenditure
Ongoing Budget Needs: Hardware/Software updates – Software and computers being used for in-class activities will need to be updated for compatibility with current operating system(s). One-time Expenditure: • The department needs a testing center for online courses with well trained personal to run it, especially when we propose to have online/hybrid math courses for the AS-T degree. • Laptops/tablets for faculty to use as teaching tools for lectures in classes – Students find such devices more beneficial for them than traditional teaching tools such as chalkboard or whiteboard. Faculty can save their lecture notes and provide them to their students or refer to them at a later time during lectures. • Graphing calculators and math softwares such as Matlab, Maple, MathType, Minitab, etc. – These are needed and/or required for our advanced math courses and Statistics. • Bluetooth-enabled computers and projectors – Bluetooth capability will enable faculty to move freely around the room to allow students to input their work on the projectors wirelessly.

Request linked to SLO/PLO #
PLO #1,2,3

Total Cost

Strategic Initiatives (student centered, organizational transformation, community engagement)
Yes

Improving Student success rates
Yes

Achievement of program set standard for student success
Yes

4. **Equipment/Supplies**

Ongoing Budget Needs
Hardware/Software updates – Software and computers being used for in-class activities will need to be updated for compatibility with current operating system(s).

One-Time Expenditure
• Twenty 2-in-1 laptops/tablets for faculty to use as teaching tools - Students find such devices more beneficial for them than traditional teaching tools such as chalkboard or whiteboard. Faculty can save their lecture notes and provide them to their students and/or refer to them at a later time during lectures. • Three class sets of graphing calculators (150 graphing calculators) and two class sets of laptops (100 laptops) with installed math softwares such as Excel, Maple, Matlab, MathType, Minitab, etc. – Since the math department does not currently have classrooms with computers designated for some of its advanced math courses, math faculty need these portable devices to take with them to classes for their students to use during in-class activities.

Request linked to SLO/PLO #
PLO #1,2,3

Total Cost

Strategic Initiatives (student centered, organizational transformation, community engagement)
Yes

Improving Student success rates
Yes

Achievement of program set standard for student success
Yes

Attach Files

Attached File

Math 013 SLO.pdf.docx (/Form/Module/_DownloadFile/1469/41960?fileId=52)

Mathematics 022.docx (/Form/Module/_DownloadFile/1469/41960?fileId=53)

Mathematics 025.docx (/Form/Module/_DownloadFile/1469/41960?fileId=54)

Mathematics 052.docx (/Form/Module/_DownloadFile/1469/41960?fileId=55)

Mathematics 061.docx (/Form/Module/_DownloadFile/1469/41960?fileId=56)

Mathematics 073.docx (/Form/Module/_DownloadFile/1469/41960?fileId=57)

Mathematics 111.docx (/Form/Module/_DownloadFile/1469/41960?fileId=58)

Program Review Math 61.pdf (/Form/Module/_DownloadFile/1469/41960?fileId=59)

Math 78.docx (/Form/Module/_DownloadFile/1469/41960?fileId=60)

Mathematics 14.docx (/Form/Module/_DownloadFile/1469/41960?fileId=61)

Math 71.docx (/Form/Module/_DownloadFile/1469/41960?fileId=62)

Math 062.docx (/Form/Module/_DownloadFile/1469/41960?fileId=63)

Math 063.docx (/Form/Module/_DownloadFile/1469/41960?fileId=64)

Program Review Minutes Math Department.zip (/Form/Module/_DownloadFile/1469/41960?fileId=65)

Program Review Division Meeting Minutes.zip (/Form/Module/_DownloadFile/1469/41960?fileId=68)

Math 066 SLO.pdf (/Form/Module/_DownloadFile/1469/41960?fileId=69)

Math 067 SLO.pdf (/Form/Module/_DownloadFile/1469/41960?fileId=70)

Math 066B SLO.pdf (/Form/Module/_DownloadFile/1469/41960?fileId=71)

Math 067B SLO.pdf (/Form/Module/_DownloadFile/1469/41960?fileId=72)

IEC Reviewers

IEC Mentor
Vicki Brewster

IEC Second Reader
Fahmida Fakhruddin

All Fields

Instructional Comprehensive Program Review: Philosophy PR 23/24

Cover

Overview

Program Review Year 2024

Title Philosophy PR 23/24

Year of Last Comprehensive Review Fall 2018

Year of Last Mini Update, if applicable 03/07/2022

Originator Mishra, Bhawana

Area Dean Colleen Calderon

Division
SocSci, Humnt, Arts, & PE

Department
Philosophy

Subject

- PHIL - Philosophy

Is this a review for a degree/certificate or all the courses in the subject?
All Courses

Courses

- PHIL 010 - Introduction to Philosophy - Active
- PHIL 030 - History of Ancient and Medieval Philosophy - Active
- PHIL 040 - History of Modern Philosophy - Active
- PHIL 060 - Logic and Critical Thinking - Active
- PHIL 065 - Introduction to Ethics - Active
- PHIL 070 - Comparative Religions - Active
- PHIL 090 - Introduction to Logic - Active

Co-Contributors

*Co-Contributor must be chosen before proposal is launched

- Calderon, Colleen
- Chang, Jason
- Harwood, Sterling

Overview

Evergreen Valley College guides all students to pathways that reach their educational and career goals through equity-centered, innovative academic programs and support services. By creating a learning environment where everyone feels welcomed and supported, we are committed to a culture of inquiry, growth, and respect that creates an equitable society in which all can participate and prosper.

1.Student-Centered: We provide access to quality and efficient programs and services to ensure student success.

- **Access**
- **Curriculum and programs**
- **Services**

2. Community Engagement: We will transform the college image and enhance partnerships with community, business and educational institutions.
Areas of focus are:

- **Increase visibility**
- **Develop strategic partnerships**
- **Building campus community**

3.Organizational Transformation: We create a trusting environment where everyone is valued and empowered.
Areas of focus are:

- **Communication**
- **Employee development**
- **Transparent Infrastructure**

- **1. Provide a brief summary of your program. Please include a brief history and discuss any factors that been important to the program's development.**

From 1995 to 2012, the department had one full-time instructor, Kelley Wells, and several part-time instructors. During that time, and until the Fall of 2023, four philosophy courses were offered regularly:

- Philosophy 010 - Introduction to Philosophy
- Philosophy 060 - Logic and Critical Thinking
- Philosophy 065 - Introduction to Ethics
- Philosophy 070 - Religion: The Living Hypothesis

Most courses were offered during the day. Until 2014, some sections were also offered during the evening. The change in Dr. Wells employment in 2012 from full-time to part-time decreased the course capacity of the department. The number of sections offered every year steadily decreased. Philosophy 70 stopped being offered in Fall 2012. All courses were in-person

The COVID-19 pandemic forced all courses online in the middle of Spring 2020. Fortunately, most courses were already in the process of being modified to include online supplements. In the Fall of 2021, Bhawana Mishra was hired as a full-time instructor. This department capacity increase allowed for more curriculum work to get accomplished. In the Fall of 2022, Philosophy 70 started being offered again. By the Fall of 2023, the department had successfully created three new courses and an AA-T degree in Philosophy.

As of Fall 2023, the department offers the following courses, all of which have online supplements:

- Philosophy 010 - Introduction to Philosophy
- Philosophy 030 - Ancient and Medieval Philosophy

- Philosophy 040 - Modern Philosophy
- Philosophy 060 - Logic and Critical Thinking
- Philosophy 065 - Introduction to Ethics
- Philosophy 070 - Religion: The Living Hypothesis
- Philosophy 090 - Introduction to Logic

All courses are being offered regularly to facilitate degrees for Philosophy majors, and enrollment remains strong.

- **2. Please provide an update on the program's progress in achieving the goals (3 years) set during the last comprehensive program review.**

This chart includes the goals identified in the last comprehensive program review and an update:

Goal	Update
AA degree	This was accomplished in the Spring of 2023.
Clear articulation in course catalog of Philosophy courses' relevance to various academic and professional fields	This has not been done yet.
Increased Learning Communities	This has not been done.
Increased involvement with Service Learning	Many Philosophy courses offered a Service Learning option. According to the SL office, approximately 15 to 20 students participated in Service Learning each semester.
At least one evening course offering	There are no evening courses offered in the department.
At least one hybrid or online section offering for each of the two courses, Phil 10 and Phil 60.	All of the current course offerings have online sections: Phil 10, Phil 30, Phil 60, Phil 65, Phil 70, Phil 90. None of the Philosophy courses are offered in hybrid or synchronous formats.
Development of standard "Honors" option in each course	While Honors contracts have been awarded for Phil 10, Phil 60, and Phil 65, a standard option for each course has not been developed.
One or two additional Philosophy courses	There are three additional Philosophy courses.
Full-time faculty member	A full-time faculty member was hired in Fall 2021.

- **3. Please state and recent accomplishments for your program and show how it contribute to the College's mission and success.**

The biggest recent accomplishment for the Philosophy program was the development of three new courses which paved the path for the new AA-T degree. Giving more course and degree options to students facilitates timely graduation and transfer to four year institutions. Knowing that Philosophy is also a viable degree choice broadens the perspectives of our students of what academic and

professional options await them. The Philosophy program is strongly focused on training students to think critically about themselves and the world around them, preparing them to be active participants and leaders in their communities.

Also, all Philosophy courses have robust online sections and zero textbook cost (ZTC) options. This not only facilitates access to courses for students in a wide variety of situations, but also allows for a completely online and ZTC AA degree. This directly contributes to EVC's student-centered focus.

The hiring of a full-time faculty member in the Fall of 2021 has allowed for the growth of the program and increased collaborations with other programs on campus, including student support services, special academic programs, and other academic departments.

In the last year, the Philosophy program has also contributed to campus-wide initiatives. The Philosophy 70 course offered opportunities to students to visit local places of worship and listen to panels of EVC staff and faculty about their faith traditions. The Philosophy program also facilitated a campus-wide field trip to the Kehindy Wiley exhibit at the De Young Museum in San Francisco, and actively promotes campus events to its students.

- **4. If you received resource allocation for your last program review cycle, please indicate the resources you received and how these resources were utilized to impact student success and / or importance to your program. (The resources can be personnel or fiscal)**

We did not receive any resource allocation in the last program review cycle.

- **5. Please describe where you would like your program to be three years from now (program goals) and how these support the college mission, strategic initiatives and student success.**

Three years from now, I would like the Philosophy Department to have a stronger presence on campus and in the community. I would like the Philosophy Department to do more outreach to recruit students to the classes, which will be taught in innovative and interesting ways that are humanized, student-centered, and anti-racist. The Philosophy Department should organize at least one campus-wide event that serves all students. This could be a field trip, seminar, workshop, movie screening, debate, or something similar.

I would like the Philosophy Department to develop relationships with various other programs on campus, whether they be other academic departments or special academic or student support programs. There is also an opportunity for the Department to have greater engagement with the surrounding community; there is a possibility of teaching Philosophy in Elmwood Correctional Facility.

Specific goals for the next three years are:

- Develop a brochure or other marketing material for EVC's Philosophy Department, independently or through the college catalog.
- Organize at least one campus-wide event per year, which may include:
    - Philosophy student symposium.
    - "Movie with a Philosopher" event.
    - Field trip to a Philosophically interesting place/event.
- Create a new course in cooperation with another department. A likely candidate is a Biomedical Ethics course in cooperation with the Biology and Nursing Departments.
- Include one course as part of a special academic program, like Umoja.

Program Set Standards

Overall, EVC's Institution Set Standard for success rate is 72%, and the aspirational goal for student success is 75%.

Success Rate (completion with "C" or better)	Program	EVC	Program Set Standard (established during last comprehensive PR)	Program Success Goal (new)
F'16-F'22 average		72.31%		

Courses with no Degree or Certification

PHIL 090 - Introduction to Logic	Created: 08/22/2022
Create / Modify DE Course	Originator: Bhawana Mishra
PHIL 070 - Comparative Religions	Created: 08/22/2022
Modify Course	Originator: Bhawana Mishra
PHIL 065 - Introduction to Ethics	Created: 08/22/2022
Modify Course	Originator: Bhawana Mishra
PHIL 060 - Logic and Critical Thinking	Created: 08/22/2022
Modify Course	Originator: Bhawana Mishra
PHIL 040 - History of Modern Philosophy	Created: 12/10/2020
New Course	Originator: Bhawana Mishra
PHIL 030 - History of Ancient and Medieval Philosophy	Created: 05/06/2021
New Course	Originator: Bhawana Mishra
PHIL 010 - Introduction to Philosophy	Created: 08/22/2022
Create / Modify DE Course	Originator: Bhawana Mishra

Program Success Rate 73.11

***Program Set Standard* : It is recommended that programs identify a success standard. This standard should reflect the baseline success rate.**

Program Set Standard 66%

***Recommendation:* 90% of the 6 year average success rate could be your program standard (average x 0.9).**

***Program Success Goal* : It is recommended that programs identify a success goal. This goal should reflect the success rate to which your program aspires.**

Program Success Goal 75%

- **Is your program success rate higher or lower than the campus?**

  Our program success rate is higher than the campus.

- **If your success rate is higher than the campus, how are you helping students succeed in and outside the classroom? If your program success rate is lower, what are some strategies your program is implementing to improve?**

  Our department has increased the use of Early Alert and other student support programs. We have also increased our efforts to follow up with students who may be falling behind and work with them to catch up. We have steered away from large, stressful summative assessments towards smaller and more regular formative assessments. This has improved student engagement and success.

- **Is the current program success rate higher than the program set standard?**

  Yes, the current program success rate (73.11%) is higher than the program set standard (66%).

- **How close is the program to meeting the program success goal?**

  Our success goal is 75%, which is very close to our current success rate of 73.11%. Reaching our success goal is feasible with some extra efforts.

- **Are these measures (program set standard and program success goal) still current/accurate? If not, please describe here and reset the standards.**

  Yes, these measures are current and accurate.

Success Rates: Measures by IPEDs Race/Ethnicity

- **American Indian: 91 - 75.500%**

  Program Average Total Enrolled
  1.830

  Program Success Rate
  61.670

- **Asian: 9182 - 79.970%**

  Program Average Total Enrolled
  151.800

  Program Success Rate
  79.660

- **Black or African American: 455 - 61.770%**

  Program Average Total Enrolled
  9.150

  Program Success Rate
  60.760

- **Hawaiian/Pacific Islander: 85 - 62.970%**

  Program Average Total Enrolled
  2.540

  Program Success Rate
  61.790

- **Latinx: 8952 - 64.890%**

  Program Average Total Enrolled
  155.000

  Program Success Rate
  67.200

- **Two or More Races: 609 - 70.560%**

  Program Average Total Enrolled
  14.770

  Program Success Rate
  69.580

- **Unknown: 1397 - 72.850%**

  Program Average Total Enrolled
  23.850

  Program Success Rate
  72.100

- **White: 1207 - 73.590%**

  Program Average Total Enrolled
  24.770

  Program Success Rate
  71.970

Success Rates: Measures by Gender

- **Female: 12034 - 74.070%**

  Program Average Total Enrolled
  185.000

  Program Success Rate
  74.710

- **Male: 9868 - 70.160%**

  Program Average Total Enrolled
  195.770

  Program Success Rate
  71.370

- **No Value Entered: 76 - 72.420%**

  Program Average Total Enrolled
  2.080

  Program Success Rate
  61.670

Success Rates: Measures by Age

- **17 & Below: 791 - 87.140%**

  Program Average Total Enrolled
  18.000

  Program Success Rate
  86.330

- **18-24: 14936 - 69.850%**

  Program Average Total Enrolled
  300.230

  Program Success Rate
  71.860

- **25-39: 4313 - 75.310%**

  Program Average Total Enrolled
  54.770

  Program Success Rate
  75.110

- **40 & Over: 1929 - 78.380%**

  Program Average Total Enrolled
  9.620

  Program Success Rate
  68.710

- **Unknown: 11 - 65.690%**

  Program Average Total Enrolled
  1.000

  Program Success Rate
  100.000

- **a. With respect to disaggregated success rates, list any equity gaps that are identified and discuss interventions your program will implement to address these equity gaps? Please include a timeline of implementation and reassessment.**

  For almost all of the disaggregated success rates, the Philosophy program success rates were very close or higher than the college success rates. The only notable difference was for students age 40 and over, where our Program success rate was 68.71% versus 78.38% for the college. This could be due to discomfort with asynchronous, online coursework in that age group. However, since the average enrollment was less than 10 students per semester, it is also hard to get good data from such a small sample size.

  Compared to the overall Program Success rate (73.11%), groups that had notably lower success rates were:

  - American Indian: 61.67%, 1.83 average enrollment
  - Black/African-American: 60.76%, 9.15 average enrollment
  - Hawaiian/Pacific Islander: 61.79%, 2.54 average enrollment
  - Latinx: 67.20%, 155 average enrollment
  - Ages 40 & over: 68.71%, 9.61 average enrollment

  Based on past experience, the best way to address these equity gaps would be to increase regular follow up with students who are falling behind, offering campus and course support services. We will work to ensure that all Philosophy faculty are using the Early Alert service by Spring 2024. Faculty will

also work on providing flexible deadlines for work to allow for students with difficult life circumstances to turn in their work. This strategy should be implemented by Fall 2024.

- **b. With respect to disaggregated success rates (ethnicity / race, gender and age), discuss student performance in reaching your program set standard for student success as well as reaching the program success goal.**

  Our Program Set Standard is 66% and the Program Success Goal is 75%.

  The following groups already meet the Program Set Standard:

  - Asian
  - Latinx
  - Two or More Races
  - Unknown
  - White
  - Female
  - Male
  - 17 & Below
  - 18-24
  - 25-39
  - 40 & Over
  - Unknown age

  For the groups that do not meet the Program Set Standard, we will strive for these targets using the same strategies used to address equity gaps (follow ups, support services, flexible deadlines.)

  The following group meet, or very nearly meet, the Program Success Goal:

  - Asian
  - Female
  - 17 & Below
  - 25-39

  For the groups that do not meet the Program Success Goal, innovative strategies may be used to meet this goal. These innovative strategies include an increase in formative assessments leading up to summative assessments, opportunities to improve and re-submit work, and creating culturally relevant course materials. Increasing a sense of community among the students has also shown to improve engagement and success in the class.

- **c. If your program offers course sections fully online, please contact the office of Research, Planning and Institutional Effectiveness to obtain a student success report on the online sections. Address any differences in student success rates between fully online courses and classroom courses.**

  The overall success rate for online sections from Fall 2020 to Fall 2022 was 76.60%. The overall success rate for face to face sections from Fall 2016 to Fall 2022 was 66.31%. For all disaggregated groups, except “White” and “Ages 40 and over,” the success rate was higher for online courses than face to face courses.

These results are quite significant. It shows that our students are more successful when taking courses online than in-person. This could mean that there could be barriers to success when attending in-person, including transportation, illness, work and family responsibilities, and social anxiety. It is difficult to know the exact reason without asking these specific questions of the students.

It is not very surprising that students aged 40 and over do better in face to face courses. Presumably, if they are taking courses at this age, it is because they have deliberately set aside time for it from work and family obligations. They likely don't have the same barriers as other students in coming in-person, and perhaps they prefer the modality to online, asynchronous learning.

What is not entirely obvious is why White students are more successful face to face than online. It simply could be that, as a group, they don't face similar barriers for in-person courses and so online courses may be less engaging and not much more convenient, leading to lower success rates.

Also notable is that the success rate for online courses meets the program success goal of 75%.

Program Awards - If Applicable

If the classes in your program lead to a degree or certificate, please visit the DataMart and indicate how many degrees/certificates were awarded in your program:
http://datamart.cccco.edu/Outcomes/Program_Awards.aspx
(http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

You will need to select drop down menus and then "select program type by major of study" (for example, select Legal for paralegal studies).

Then at the bottom of the report, select the box "program type- four digits TOP", then update report to get program specific information.

Degree Type

- **AA-T**

  Number of Awards (Examine 2018-19, 2019-120 data, 2020-21 data and 2021-22 data)
  0

  Discussion
  The AA-T in Philosophy just began being offered in Fall 2023. Therefore, no degrees have been awarded yet.

Student Enrollment Types

Student Enrollment Type: Day or Evening Student

- **Day: 4505 - 50.500%**

  Program Average Headcount
  223.000

  Program Percentage of Total
  49.300

- **Day & Evening: 2656 - 29.800%**

Program Average Headcount
106.000

Program Percentage of Total
23.500

- **Evening: 951 - 10.700%**

  Program Average Headcount
  18.000

  Program Percentage of Total
  4.000

- **Unknown: 807 - 9.000%**

  Program Average Headcount
  105.000

  Program Percentage of Total
  23.200

Student Enrollment Type: Academic Load

- **Full Time: 2919 - 32.700%**

  Program Average Headcount
  198.000

  Program Percentage of Total
  49.700

- **Half Time or less than half time: 5843 - 65.500%**

  Program Average Headcount
  159.000

  Program Percentage of Total
  39.900

- **a. Discuss any changes in program enrollment types (day vs evening, full-time vs part-time) since your last program review?**

- **b. Discuss how do your program enrollments (Pct of total) compare to EVC?**

  The following chart summarizes and compares our program enrollments and EVC's:

	Philosophy	Evergreen
Day/Evening		
Day	49.3%	50.5%
Day & Evening	23.5%	29.8%
Evening	4.0%	10.7%
Unknown	23.2%	9%
Total:	100.0%	

Load		
Full Time	49.70%	32.7%
Half Time	39.90%	65.5%
Less than Half Time	5.50%	
No Credit Assigned	3.80%	
Overload	1.00%	
Total:	100.00%	

The only real significant difference is in the percentages of students enrolled according to load. Our program has many more full time students and significantly less half time students. This would make sense since our program tends to attract those wanting to fulfill their GE requirements for transfer.

- **c. Based on the data, would you recommend any changes?**

  I would not recommend any changes based on the data.

Student Demographics - Headcount

Student Demographic: Gender

- **Female: 4914 - 55.170%**

  Program Headcount
  187.000

  Program Percentage of Total
  48.580

- **Male: 3965 - 44.400%**

  Program Headcount
  196.000

  Program Percentage of Total
  50.930

- **No Value Entered: 38 - 0.430%**

  Program Headcount
  2.000

  Program Percentage of Total
  0.540

Student Demographic: Age

- **17 & Below: 517 - 5.810%**

  Program Headcount
  18.000

  Program Percentage of Total
  4.700

- **18-24: 5364 - 60.090%**

Program Headcount
302.000

Program Percentage of Total
78.250

- **25-39: 2101 - 23.600%**

  Program Headcount
  55.000

  Program Percentage of Total
  14.530

- **40 & Over: 931 - 10.440%**

  Program Headcount
  9.000

  Program Percentage of Total
  2.510

- **Unknown: 6 - 0.060%**

  Program Headcount
  1.000

  Program Percentage of Total
  0.220

Student Demographic: Race/Ethnicity (IPEDs Classification)

- **American Indian: 35 - 0.390%**

  Program Headcount
  2.000

  Program Percentage of Total
  0.560

- **Asian: 3634 - 40.800%**

  Program Headcount
  151.000

  Program Percentage of Total
  39.310

- **Black or African American: 205 - 2.310%**

  Program Headcount
  9.000

  Program Percentage of Total
  2.380

- **Hawaiian/Pacific Islander: 33 - 0.360%**

  Program Headcount
  3.000

Program Percentage of Total
0.650

- **Latinx: 3608 - 40.490%**

  Program Headcount
  157.000

  Program Percentage of Total
  40.740

- **Two or More Races: 248 - 2.800%**

  Program Headcount
  15.000

  Program Percentage of Total
  3.910

- **Unknown: 598 - 6.590%**

  Program Headcount
  24.000

  Program Percentage of Total
  6.220

- **White: 556 - 6.260%**

  Program Headcount
  25.000

  Program Percentage of Total
  6.530

- **a. Based on the program total headcount and percent change year to year, discuss if your program growing or declining. If so, what do you attribute these changes in enrollment to and what changes will the program implement to address them?**

  While semester to semester enrollment has both gone up and down, the program as a whole seems to be staying steady. What could have been a great decline in enrollment during the beginning of the pandemic was prevented by a robust online offering of all of our courses.

  The data from Fall 2022 also shows that one addition course was offered after many years (Phil 70), and more courses have been added since them. This will both increase the number of sections offered and the number of students enrolled. The changes that have been implemented in the last year (addition of three new courses and re-offering a course that was not offered for many years) will hopefully affect enrollment changes in the near future.

  The other anticipated change is that one of our most popular courses (Phil 60) will no longer fulfill its current GE area (Critical Thinking) in the new IGETC pattern. In preparation for this anticipated decrease in enrollment, we hope to get more of the EVC Philosophy courses on the California Community College CVC Exchange to attract students from around the state.

- **b. Discuss any gaps have you identified in your program. Discuss how your program enrollment is similar or different from the campus. Discuss which gender, age, and/or ethnic group are proportionally smaller than campus make up.**

The following chart compares our program enrollment numbers and EVC's:

	Philosophy		EVC		Philosophy vs EVC
	Ave headcount	Percent of total	Ave headcount	Percent of total	
American Indian	2	0.56%	35	0.39%	0.17%
Asian	151	39.31%	3436	40.80%	-1.49%
Black/African American	9	2.38%	205	2.31%	0.07%
Hawaiian/Pacific Islander	3	0.65%	33	0.36%	0.29%
Latinx	157	40.74%	3608	40.49%	0.25%
Two or More Races	15	3.91%	248	2.80%	1.11%
Unknown	24	6.22%	598	6.59%	-0.37%
White	25	6.53%	556	6.26%	0.27%
Female	187	48.58%	4914	55.17%	-6.59%
Male	196	50.93%	3965	44.40%	6.53%
No Value Entered	2	0.54%	38	0.43%	0.11%
17 & Below	18	4.70%	517	5.81%	-1.11%
18-24	302	78.25%	5364	60.09%	18.16%
25-39	55	14.53%	2101	23.60%	-9.07%
40 & Over	9	2.51%	931	10.44%	-7.93%
Unknown	1	0.22%	6	0.06%	0.16%

In terms of ethnic demographics, there are no significant differences between our program's and EVC's enrollment. We have slightly fewer Asians in our courses compared to EVC's overall population, but the different is not significant.

In terms of gender demographics, we have less females and more males in our courses than EVC's general population. This may be attributed to the long-standing gender-stereotypes in the field of Philosophy and the over-representation of male philosophers in most Philosophy courses.

In terms of age, we have more students between the ages of 18 and 24 in our courses, and consequently less of the other age groups. This may simply be because the Philosophy courses fulfill the standard GE/transfer requirements for students going from high school to community college to a four-year institution. Our "standard" courses fit well with this traditional transfer path for students coming straight from high school.

- **c. Discuss what interventions the program can implement to address any gaps in enrollment.**

The only gap of concern is that our program has a lower percentage of female students compared to EVC's general enrollment. To address this, the department's outreach campaign can emphasize the presence of female philosophers in our courses. We also hope to collaborate with the Nursing Department to offer a Bio-Medical Ethics course, which will increase the enrollment of nursing

students, a majority of which are women. Also, be emphasizing the issues raised in our Philosophy courses and the career paths open to Philosophy majors, we hope that more female students will become interested in our courses.

Institutional Effectiveness (6.5 year average)

EVC Capacity: 61.69% EVC Productivity: 14.27

Program Capacity
83.57

Program Productivity
21.62

Is your capacity rate higher or lower then the campus?
Higher

Is your productivity goal higher or lower than the campus?
Higher

If the program capacity and/or productivity is lower than the campus, please provide rationale
Both our capacity and productivity are higher than the campus'.

Curriculum

Related Assessments
Phil 030 - Ancient & Medieval Philosophy- Created: 02/28/2024 New Section Level SLO Assessment Report Originator: Bhawana Mishra (/Form/Module/Index/5314)
Phil 090 - Introduction to Logic- Created: 09/03/2023 New Section Level SLO Assessment Report Originator: Bhawana Mishra (/Form/Module/Index/3719)

- **1. Identify and updates to curriculum since the last comprehensive program review, including and new programs and indicate the 6-year timeline for scheduled course outline revision. For CTE, the time line is 2 year.**

  The following updates have been made to the curriculum since the last Program Review:

  - All existing courses were updated with revised SLOs, updated textbooks, and DE addenda.
  - Three new courses were added: Phil 30, Phil 40, and Phil 90.
  - A new AA-T was developed and approved, and has been offered effective Fall 2023.

  The following chart summarizes the course outline revision schedule:

Course	Date of Last Review	Next Review
Phil 10	4/22/21	Fall 2024
Phil 30	2/22/2022	Spring 2025
Phil 40	3/8/2022	Spring 2025
Phil 60	10/27/2022	Fall 2025
Phil 65	10/27/2022	Fall 2025

Phil 70	10/27/2022	Spring 2026
Phil 90	10/27/2022	Spring 2026

- **2. Identify all the courses offered in the program and describe how these courses remain relevant in the discipline. For courses your program has not offered in the past two years, please discuss a plan on how to deal with these courses (if your program is not going to de-activate these courses, please explain why).**

All of our courses have been offered within the past two years and will continue to be offered at least once a year.

Phil 10 - Introduction to Philosophy

This course is the foundation for the discipline, offering a thematic overview of the most important questions and themes in the field of Philosophy. The course covers the ideas of many major Philosophers so that students are familiar with their most important contributions in the field. The course also introduces and discusses the most important issues in the field and various philosophers' perspectives on those issues. The course offers a survey of the other specific Philosophical disciplines within the field, including metaphysics, epistemology, ethics, and logic.

The course helps students reflect critically about how they view the world, how they view others, and how this reflection can impact and possibly improve their behavior and relationships. In some aspects, the topics are directly relevant to students' lives, particularly in the discussion of ethics or political philosophy. However, all the topics train the students to be more analytical of themselves and the world around them, which can help with their other courses, careers, and in life in general.

- C-ID PHIL 100
- Transfer Status: CSU/UC
- Degree Applicable: AA/AS
- CSU GE: C2
- IGETC: 3B
- District GE: C2

Phil 30 - Ancient and Medieval Philosophy

This course addresses ancient philosophy with emphasis on the historical development of ancient Chinese, Greek, and Indian traditions, and medieval philosophy with a focus on the Islamic world and philosophers from diverse religious backgrounds.

Through this course, students understand how the historical context of various civilizations gave rise to some of the most important philosophical ideas that shaped those cultures, political systems, and social systems. This unique course also challenges and broadens the definition of Philosophy beyond Eurocentric standards. This can help students feel that their own cultural backgrounds have valuable intellectual contributions.

- C-ID PHIL 130
- Transfer Status: CSU/UC
- Degree Applicable: AA/AS
- CSU GE: C2
- IGETC: 3B
- District GE: C2

Phil 40 - Modern Philosophy

This course examines the major philosophers and philosophical movements from the 16th to 18th centuries in several regions of the world, including Africa, South Asia, East Asia, and Europe. It is a continuation of Phil 30 and part of the “History of Philosophy” series required of Philosophy majors.

Like Phil 30, this course provides historical context to the circumstances that gave rise to the different philosophical ideas of diverse societies in the last several centuries. And, like Phil 30, the diverse nature of the philosophies covered in the course expand the definition of Philosophy for students and reinforce the intellectual value of all cultural backgrounds.

- C-ID PHIL 140
- Transfer Status: CSU/UC
- Degree Applicable: AA/AS
- CSU GE: C2
- IGETC: 3B
- District GE: C2

Phil 60 - Logic and Critical Thinking

The skills acquired in Logic and Critical Thinking help a student be better ‘consumers’ of information. This information can come from formal education, news media, political messages, social media, etc. They learn to discriminate between sound or strong logical arguments, and rhetorical devices and emotional fallacies designed to manipulate a person into accepting something without good reason. These skills are foundational certainly for any student of Philosophy, but also for any person.

Students who take this course are less likely to be swayed and manipulated by media messages and advertisements because they learn to rely on only legitimate arguments for a certain position. The course has also been updated to include more recently relevant skills like determining whether something is fake news and understanding how social media can manipulate one’s view of the world. These are necessary skills for any member of a society, particularly in a democratic society where members are expected to make informed decisions influencing the future of their community.

The course also helps in attaining practical life skills, like being a smart consumer and making good ethical decisions. The course also helps students be better at presenting their arguments, either verbally or on paper, and be more convincing using sound and strong logic. Students are less likely to use personal or emotional attacks when trying to make a point, which is a critical skill to have for civic discourse.

- Transfer Status: CSU/UC
- Degree Applicable: AA/AS
- CSU GE: A3
- IGETC: None
- District GE: A3

Phil 65 - Introduction to Ethics

Ethics is one of the most accessible courses within the discipline because it discusses issues that are relevant and interesting to every person. Through this course, students learn critical thinking skills and also how philosophers approach moral issues systematically. Students are taught now what to think, but how to think.

While all philosophy courses endeavors to help students think more critically about their lives, the ethics course focuses on students’ ethical lives, and helps them analyze their stances on common moral issues to ensure they have good reasons to believe what they do. They are also to more

effectively engage in debates about moral issues.

- C-ID PHIL 120
- Transfer Status: CSU/UC
- Degree Applicable: AA/AS
- CSU GE: C2
- IGETC: 3B
- District GE: C2

Phil 70 - Comparative Religions

Religion and Philosophy often ask the same kinds of questions. Religion has played a large part in shaping many civilizations' intellectual history. Therefore, it enriches our understanding of philosophy to study how various religions have answered some of the most primal and eternal human questions.

Religion continues to play a large part in people's lives as individuals, communities and nations, for peace and for conflict. It serves us well to gain a greater understanding of the world's largest religions.

- Transfer Status: CSU/UC
- Degree Applicable: AA/AS
- CSU GE: C2
- IGETC: 3B
- District GE: C2

Phil 90 - Introduction to Logic

While Phil 60 focuses on critical thinking, generally, and informal logic, specifically, this course introduces principles and methods of formal logic for analyzing and evaluating arguments. While this course may not be of interest to the general student, it remains a foundational skill for anyone majoring in Philosophy or wanting a better understanding of the logical underpinnings of argumentation.

This course is a requirement for the AA-T in Philosophy.

- C-ID PHIL 110
- Transfer Status: CSU/UC
- Degree Applicable: AA/AS
- CSU GE: None
- IGETC: None
- District GE: None

- **3. If you have a degree or certificate, please include a diagram of your program's guided pathways program map. (A program map indicates courses suggested for each semester, across two years, upon completion a student would qualify for a degree/certificate).**

Please see attached for sample program map.

Term 1	Units	CSU GE	IGETC FOR CSU	NOTES
PHIL 010	3	C2	3B	CORE - or PHIL 065
ENGL 001A	3	A2	1A	
GE	3	C1	3A	

GE	3	E	Transferable Elective
Transferable Electives	3		
Total Units	15		

Term 2	Units	CSU GE	IGETC for CSU	NOTES
PHIL 090	3			
HIST 010A	3	D	4	Or other LIST B course. Two courses from LIST B must be completed.
ENGL 001C	3	A3	1B	LIST C
GE	3	B4	2A	
Transferable Electives	3			
Total Units	15 - 16			

Term 3	Units	CSU GE	IGETC for CSU	NOTES
PHIL 060	3	A3	Transferable Elective	Or other LIST A course
GE	3	A1	1C	
GE	3	B2	5B	
GE	3	D	4	Recommended: US-1, US-2, US-3*
Transferable Electives	3			
Total Units	15			

Term 4	Units	CSU GE	IGETC for CSU	NOTES
PHIL 070	3	C2	3B	Or other LIST B course. Two courses from LIST B must be completed.
GE	3 - 4	B1/B3	5A/5C	
GE	3	D	4	US-1, US-2, US-3 *
GE	3	F	Transferable Elective	
Transferable Electives	2 - 3			As needed to reach a minimum of 60 transferable units
Total Units	15			

- **4. Identify and describe innovative strategies or pedagogy your department/program developed/offered to maximize student learning and success. How did they impact student learning and success?**

Philosophy courses have included practical assignments that ask students to engage with their community.

As part of the Logic and Critical Thinking course, students are asked to implement the reasoning skills they learn to advocate for a particular social issue of their choosing by writing letters to local elected officials and op-ed articles for local newspapers. This gave students practical experience in civic engagement and contributes to the college's mission of empowering students to be civically responsible global citizens.

In the Ethics course, students are offered the opportunity to participate in EVC's Service Learning program and volunteer some of their time to a cause related to an ethical issue discussed in class. This provided students' practical experience in a field that often only remains theoretical, and provided a tangible experience of community engagement. This also allowed students to pursue and validate their diverse interests based on their diverse backgrounds.

Almost every philosophical topic covered is taught in a way that asks the students to make connections to modern day issues. For example, a study of Aristotle's criticism of democracy leads to a conversation of Voter ID laws. A study of Marx's philosophy leads to a conversation about the effect of money on the political process. A study of logical fallacies is made practical by having students find those fallacies in political speeches and television advertisements.

The Comparative Religions course offers students an opportunity to visit local places of worship that are new to them, or listen to panels consisting of EVC staff and faculty talking about their faiths. This builds community within EVC and with the the local area.

Philosophy courses have been designed to be more student-centered and anti-racist.

The Introduction to Philosophy course has started to include philosophers of diverse cultural backgrounds, allowing more students to identify with the perspectives shared in class. Students also have an opportunity to research and share the work of a philosopher of their choice from a non-European tradition. Modern and contemporary philosophers have been included, who address modern issues of living in a diverse society.

They are asked to create persuasive brochures about ethical or social issues of concern to them and share this information with their classroom and campus community. This allows students to explore issues of interest to them and provides them with a platform to share their experiences and perspectives with others, encouraging engagement with each other and the community and validating their own diverse viewpoints.

Students also have opportunities to present their research about a contemporary ethical issue of interest to them. This centers the students' experiences and voices in the classroom.

Innovating teaching methods have increased student engagement and student success.

Technology is used strategically in face-to-face classes to increase engagement. Mentimeter is used to give in-class game-style quizzes using students' cell phones or to allow for student input and participation during discussions. Online discussions on Canvas ensure student engagement in a socia-media type platform, opening up discussion more easily while in the physical classroom.

Many instructors use movies and other forms of popular media in class or online through Canvas as a means of making philosophical topics more accessible and interesting. The Matrix is used to discuss Plato's Allegory of the Cave. "Lord of the Flies" leads to a comparison between Hobbes and Locke's political philosophies. In Logic and Critical Thinking, students view videos of advertisements or political debates exemplifying the most common logical fallacies.

In online courses, PlayPosit is used to make asynchronous, online lecture videos more interactive. Students have reported that they feel more engaged and feel like they are interacting with the instructor and other students while using PlayPosit.

Professor Mishra has started experimenting with upgrading as a way to "decolonize" her classroom environment. She has also developed liquid syllabi for all of her courses to ease access to information about the course and humanize the class experience.

Student success has been greatly increased by continued follow up with students and connection to support services. Flexible grading policies and opportunities to improve work has also contributed to greater success rates.

- **5. Discuss plans for future curricular development and/or program degrees & certificates included) modification.**

Currently, all Philosophy courses are able to be offered fully asynchronous online and in-person. In the near future, I would like to see some of the sections being offered in different modalities, namely online blend and asynchronous hybrid.

Over the next several years, I would like to see the department partner with EVC's special academic programs. There are already plans to have some seats in Phil 60 be reserved for UMOJA students. Eventually, we would like to see a whole section for UMOJA. We would also like to see something similar for other special academic programs - such as ENLACE and/or ASPIRE.

As for new courses, there is some interest to develop a Bio-Medical Ethics course in cooperation with the Nursing and Biology Departments. Similar partnerships could be used to develop other courses, such as:

- Philosophy of Law
- Business Ethics
- Philosophy of Science
- African-American Philosophy.

- **6. Describe how your program is articulated with High School Districts, and/or other four year institutions. (Include articulation agreements, CID, ADTs...)**

All Philosophy courses are transferable to the CSU/UC. The following chart summarizes the courses' C-ID designation and GE statuses.

	C-ID	CSU GE	IGETC	District GE
Phil 10	PHIL 100	C2	3B	C2

Phil 30	PHIL 130	C2	3B	C2
Phil 40	PHIL 140	C2	3B	C2
Phil 60		A3		A3
Phil 65	PHIL 120	C2	3B	C2
Phil 70		C2	3B	C2
Phil 90	PHIL 110			

- **7. If external accreditation or certification is required, please state the certifying agency and status of the program.**

  There is no external accreditation or certification required for the program.

Student Learning Outcome and Assessment

Related Assessments
Phil 030 - Ancient & Medieval Philosophy- Created: 02/28/2024 New Section Level SLO Assessment Report Originator: Bhawana Mishra (/Form/Module/Index/5314)
Phil 090 - Introduction to Logic- Created: 09/03/2023 New Section Level SLO Assessment Report Originator: Bhawana Mishra (/Form/Module/Index/3719)

Student Learning Outcomes
PHIL 010 - Introduction to Philosophy - Explain philosophical methods from diverse philosophical traditions. (Active)
PHIL 010 - Introduction to Philosophy - Articulate ideas about philosophical issues as presented in primary texts. (Active)
PHIL 010 - Introduction to Philosophy - Analyze diverse philosophical ideas and positions from primary texts using philosophical methods, assumptions and principles. (Active)
PHIL 010 - Introduction to Philosophy - Evaluate philosophical arguments, methods, assumptions, and principles for consistency, relevance, and truth. (Active)
PHIL 030 - History of Ancient and Medieval Philosophy - Demonstrate mastery of philosophical skills to represent and analyze the ideas of ancient and medieval philosophers based on readings of primary texts. (Active)
PHIL 030 - History of Ancient and Medieval Philosophy - Analyze and evaluate major intellectual movements, theories, and philosophic schools of ancient and medieval philosophy in various traditions. (Active)
PHIL 030 - History of Ancient and Medieval Philosophy - Articulate and defend one's own stance on at least one ancient or medieval philosophical problem, figure or theory. (Active)
PHIL 030 - History of Ancient and Medieval Philosophy - Apply the concepts learned in this class to one’s own existence in the world. (Active)
PHIL 060 - Logic and Critical Thinking - Demonstrate the basic skills in critical thinking through written and oral expression. (Active)
PHIL 060 - Logic and Critical Thinking - Assess the basic forms of arguments. (Active)
PHIL 060 - Logic and Critical Thinking - Articulate the basic types of formal and informal fallacies. (Active)
PHIL 060 - Logic and Critical Thinking - Articulate the basic forms of scientific, causal and statistical fallacies. (Active)
PHIL 060 - Logic and Critical Thinking - Craft and articulate a complete argument on complex subject matter. (Active)

PHIL 065 - Introduction to Ethics - Assess basic meta-ethical principles and ethical reasoning through critical analysis of contemporary debates and arguments in academia and popular media. (Active)
PHIL 065 - Introduction to Ethics - Appraise and compare basic moral theories according to their foundational principles. (Active)
PHIL 065 - Introduction to Ethics - Apply ethical principles and theories to a variety of contemporary moral issues. (Active)
PHIL 065 - Introduction to Ethics - Justify one’s own stance on a moral issue and defend it against opposing views. (Active)
PHIL 090 - Introduction to Logic - Analyze an argument's components, including its premises, conclusion, and type of inference. (Active)
PHIL 090 - Introduction to Logic - Identify and utilize specific types of logical inferences and reasoning patterns commonly found in rhetoric. (Active)
PHIL 090 - Introduction to Logic - Evaluate the validity of arguments using Venn diagrams, truth tables, and natural deductions. (Active)

Program Learning Outcomes

- **1. On the program level, defined as a course of study leading to degree or certificate, list the Program Learning Outcomes (PLOs), and how they relate to the GE/ILOs. Please also indicate how the course SLOs have been mapped to the PLOs. If you are completing this program review as a department or discipline and do not offer any degrees or certificates, please write N/A in this space.**

  The following chart show the PLOs and their corresponding ILOs and SLOs.

PLO	ILO	SLOs

Critically engage, and thoughtfully respond to, ideas and theories common in the field of philosophy.	- Communication - Inquiry and Reasoning - Information Competency	PHIL 010: Articulate ideas about philosophical issues as presented in primary texts. PHIL 010: Analyze diverse philosophical ideas and positions from primary texts using philosophical methods, assumptions and principles. PHIL 030: Analyze and evaluate major intellectual movements, theories, and philosophic schools of ancient and medieval philosophy in various traditions. PHIL 030: Articulate and defend one's own stance on at least one ancient or medieval philosophical problem, figure or theory. PHIL 030: Apply the concepts learned in this class to one’s own existence in the world. PHIL 040: Analyze and evaluate major intellectual movements, theories and philosophical schools of the 16th century to 18th centuries. PHIL 060: Craft and articulate a complete argument on complex subject matter. PHIL 065: Apply ethical principles and theories to a variety of contemporary moral issues. PHIL 065: Justify one’s own stance on a moral issue and defend it against opposing views.

Apply major philosophical concepts from diverse intellectual traditions to complex issues of the 21st century.	Communication Inquiry and Reasoning Information Competency	PHIL 010: Articulate ideas about philosophical issues as presented in primary texts. PHIL 010: Analyze diverse philosophical ideas and positions from primary texts using philosophical methods, assumptions and principles. PHIL 030: Analyze and evaluate major intellectual movements, theories, and philosophic schools of ancient and medieval philosophy in various traditions. PHIL 030: Articulate and defend one's own stance on at least one ancient or medieval philosophical problem, figure or theory. PHIL 030: Apply the concepts learned in this class to one’s own existence in the world. PHIL 040: Analyze and evaluate major intellectual movements, theories and philosophical schools of the 16th century to 18th centuries. PHIL 060: Craft and articulate a complete argument on complex subject matter. PHIL 065: Apply ethical principles and theories to a variety of contemporary moral issues. PHIL 065: Justify one’s own stance on a moral issue and defend it against opposing views.

Articulate original analytical and critical ideas relevant to philosophical discourse.	Communication Inquiry and Reasoning Information Competency Personal Development	PHIL 010: Articulate ideas about philosophical issues as presented in primary texts. PHIL 010: Analyze diverse philosophical ideas and positions from primary texts using philosophical methods, assumptions and principles. PHIL 030: Analyze and evaluate major intellectual movements, theories, and philosophic schools of ancient and medieval philosophy in various traditions. PHIL 030: Articulate and defend one's own stance on at least one ancient or medieval philosophical problem, figure or theory. PHIL 030: Apply the concepts learned in this class to one's own existence in the world. PHIL 040: Analyze and evaluate major intellectual movements, theories and philosophical schools of the 16th century to 18th centuries. PHIL 060: Craft and articulate a complete argument on complex subject matter. PHIL 065: Apply ethical principles and theories to a variety of contemporary moral issues. PHIL 065: Justify one's own stance on a moral issue and defend it against opposing views.

- **2. Since your last program review, summarize SLO assessment activities and results at the course and program level. Please include dialogue regarding SLO Assessment results with division/department/college colleagues and/or GE areas. Provide evidence of the dialogue (i.e. department meeting minutes or division meeting minutes, etc.) List any SLOs or PLOs that have not been assessed in the last two years and provide an explanation of why they have not been assessed. This will be reviewed by the IEC to determine if your Program Review is approved or not.**

At the PLO level, assessments have not been completed since the degree just began to be offered in Fall of 2023. All courses, old and new, will have been offered by Spring 2024. Therefore, Fall 2025 will be the first time w can complete the PLO assessments.

The following chart summarizes when SLO assessments were last reported for each course and when we plan to complete the next ones. Please note that Phil 30 and Phil 40 are being offered for the first time and so those assessments have not yet been completed.

	Last Assessment	Next Assessment
Phil 10	10/6/22	Fall 2023
Phil 30	N/A	Fall 2023
Phil 40	N/A	Spring 2024
Phil 60	10/26/21	Fall 2023
Phil 65	9/3/23	Fall 2024
Phil 70	9/29/22	Spring 2024

Phil 90	9/3/23	Spring 2024

- **3. What plans for improvement have been implemented to your courses or program as a result of SLO assessment? Please share one or two success stories about the impacts of SLO assessment on student learning.**

  As a result of the SLO assessments, we noticed that students did not generally perform at a low level. The students who were not successful at an assignment either did not turn it in or stopped being engaged with the course. TherefFaculty and Staff (https://evc.curricunet.com/Form/Module/_Form/3682/43679)ore, while we worked to make sure students were able to learn the content - through increased formative assessments and practice exams, for example - our focus was to ensure that students remained engaged or withdrew from the class if they were not going to complete the course.

  Therefore, we decided to focus more in flexible deadlines, following up with students using Early Alert and individually through email, and offering opportunities for make-up work. Implementing these strategies greatly increased the success rate.

Faculty and Staff

Part D: Faculty and Staff

- **1. List current faculty and staff members in the program, areas of expertise, and describe how their positions contribute to the success of the program.**

Jason Chang

Education

- Ph.D. in Philosophy - University of California, Riverside, March 2012
- M.A. in Philosophy - University of California, Riverside, March 2006
- B.A. in Philosophy - Santa Clara University, June 2004

Area of expertise

Ethics, political philosophy

Professor Chang's philosophical interests lie in ethics and political philosophy. More specifically, he is interested in questions having to do with the ethical norms of public discourse in a pluralist society. His PhD dissertation aimed to offer a more honest, multifaceted public discourse than found in the current literature.

How his position contributes to program success

Professor Chang brings over 15 years of teaching experience as an adjunct instructor, online instructor, and teaching assistant. Over these years, he has developed and tried to polish an enthusiastic, personable, and unpretentious (though certainly not unprofessional) teaching style that uses the power of shared experiences, down-to-earth conversation, and Socratic dialogue as primary teaching tools. Besides his teaching experience and pedagogy, he brings to the Philosophy department a contagious enthusiasm for philosophy and a heartfelt commitment to help students achieve their educational, professional, and personal goals as well the learning outcomes of the college. He aims in his classes to cultivate critical thinking skills, respect for different viewpoints, and

lifelong learning. Finally, Professor Chang brings a dedication to the craft of teaching. He continues to reflect on ways he can grow into an even more dynamic and effective educator, believing that teaching is an ongoing process of growth and learning.

Sterling Harwood

Education

- Ph.D. in Philosophy, Cornell University 1992
- M.A. in Philosophy, Cornell University 1986
- J.D., Cornell Law School 1983
- B.A. in Philosophy, University of Maryland 1980

Areas of Expertise

Legal, Moral & Political Philosophy

How his position contributes to program success

Professor Harwood comes to the Philosophy Department with extensive teaching experience since 1982. He has taught in the San Jose/Evergreen Community College District since 1995 and at EVC since 2001. Professor Harwood has edited or co-edited three textbooks: 1) co-edited with Michael J. Gorr of Illinois State University, Crime and Punishment: Philosophic Explorations (Wadsworth Publishing Co., 2000); 2) co-edited with Michael J. Gorr of Illinois State University, Controversies in Criminal Law (Westview Press, 1992); and 3) Business as Ethical and Business as Usual (Wadsworth Publishing Co., 1996). Professor Harwood regularly assigns textbook 3) above as a required textbook for his courses, all of which have major components on ethics. His practical experience also includes serving as the campaign manager for a Congressional candidate, Dick Lane, Ph.D., successfully managing two campaigns (1996 and 1998) which won the Democratic nomination for U.S. Congress in the 15th Congressional District of California.

Bhawana Mishra

Education

- M.A. in Philosophy, San Jose State University
- B.S. in Chemistry, University of California, Berkeley

Area of Expertise

Ethics, Logic, Philosophical History of Race/Ethnicity

Professor Mishra's philosophical interests are centered around the intersection of philosophy and social justice. This includes study of ethics, philosophical history of ideas of race and class, philosophy of law, political and social philosophy. Her master's thesis was entitled "Towards a Single-Consciousness: Challenging Un-American-ness of People of Color."

How her position contributes to program success

Professor Mishra has incredible passion for teaching and affecting the outlook of students. She has taught at San Jose State University and Menlo College in addition to Evergreen, reaching diverse groups of students. In all instances, she is most interested in making Philosophy practical and applicable to students' lives. She has a strong belief that all students can understand philosophy and think critically and deeply if presented the material in a relevant and interesting way. Her classroom assignments often include practical assignments - such as creating persuasive brochures, writing an

op-ed article, or volunteering for a cause - that bring the material to life. Her goal is to ensure that students finish the class having gained knowledge about the field of philosophy, but more importantly the critical thinking skills required to ask the right questions and find the appropriate answers, and to reflect more deeply about the way in which they lead their own lives.

In recent years, Professor Mishra has become increasingly interested in learning about innovative pedagogies that can make her courses more student-centered, equitable, and anti-racist. This has led to new types of projects in her course, one of which was the subject of a white paper published by the USC Race and Equity Center. She has also developed liquid syllabi, ungrading practices, and decolonized curricula. She continues to focus her professional development with an equity lens.

- **2. In addition to major professional development activities completed by faculty and staff in the past, in particular with regards to students' success, equity, distance education, SLO assessment, guided pathways and/or innovative teaching/learning strategies, are there any additional professional development needs of your department in the future? What are they? Please provide details about a timeline.**

Jason Chang and Bhawana Mishra are certified to teach online at EVC. Sterling Harwood has yet to complete these requirements, which he intends to do.

According to EVC's DE policy, Dr. Chang and Professor Mishra will need to continue their DE certification through four hours of professional development every two years. Additionally, the Philosophy faculty plan to use PDD funds to attend relevant teaching/educational and Philosophy conferences.

Budget Planning

Part E: Budget Planning

- **1. With your Dean, review the department Fund 10 budget (operational budget) and discuss the adequacy of the budget in meeting the program's needs.**

The Philosophy Department currently has $0 Fund 10 budget.

- **2. List all external funds, i.e. fund 17, the department/program receives, and describe their primary use.**

The Philosophy Department currently receives $0 Fund 17 funds.

Technology and Equipment

Part F: Technology and Equipment

- **Review the current department technology and equipment needed and assess program adequacy. List and changes to technology or equipment since the last program review. If changes were made please indicate how the change impacted student success.**

The department does not require further technology and equipment beyond what is provided standard in the classrooms.

Additional Information

Part G: Additional Information

- **Please provide any other pertinent information about the program that these questions did not give you an opportunity to answer.**

The department will be requesting funds for the first time to support ongoing classroom/campus initiatives and to start some new ones:

Initiatiative	Cost
Philosophy 70 Field Trips (~6/year)	Transportation: $100 Food: $500
Student Symposium for Ethics Projects/Advocacy	Poster boards: $200 Facility: $500 Food: $500
Classroom supplies	Daily Journals: $120 Posters: $60 Index Cards: $15
Campus event: Movie with a Philosopher	Facility: $500 Food: $500

Future Needs and Resource Allocation Request

1. **Facilities**

   Ongoing Budget Needs

   One-Time Expenditure
   $1000

   Request linked to SLO/PLO #
   PLO#1, PLO#3

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success

Yes

2. **Equipment/Supplies**

   Ongoing Budget Needs

   One-Time Expenditure
   $1995

   Request linked to SLO/PLO #
   PLO#1, PLO#2, PLO#3

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

Total Cost
Facilities
One-Time Expenditure: $1000
Equipment/Supplies
One-Time Expenditure: $1995

Attach Files

Attached File
Philosophy 24 Additional Information for PR.pdf (/Form/Module/_DownloadFile/3682/43692?fileId=455)

IEC Reviewers

IEC Mentor
Robert Brown

IEC Second Reader
Fahmida Fakhruddin

All Fields

Physics

Cover

Overview

Program Review Year

Title Physics

Year of Last Comprehensive Review Fall 2018

Year of Last Mini Update, if applicable

Originator Batalha, Celso

Area Dean Antoinette Herrera

Division
Math, Sci. & Engineering

Department
Physics

Subject

- PHYS - Physics

Is this a review for a degree/certificate or all the courses in the subject?
Degree

- Physics, Associate in Science for Transfer - Active

Co-Contributors

*Co-Contributor must be chosen before proposal is launched

- Brown, Robert
- Fakhruddin, Fahmida
- Herrera, Antoinette
- Masuda, Michael

Overview

Evergreen Valley College guides all students to pathways that reach their educational and career goals through equity-centered, innovative academic programs and support services. By creating a learning environment where everyone feels welcomed and supported, we are committed to a culture of inquiry, growth, and respect that creates an equitable society in which all can participate and prosper.

1.Student-Centered: We provide access to quality and efficient programs and services to ensure student success.

- **Access**
- **Curriculum and programs**
- **Services**

2. Community Engagement: We will transform the college image and enhance partnerships with community, business and educational institutions.
Areas of focus are:

- **Increase visibility**
- **Develop strategic partnerships**
- **Building campus community**

3.Organizational Transformation: We create a trusting environment where everyone is valued and empowered.
Areas of focus are:

- **Communication**
- **Employee development**
- **Transparent Infrastructure**

- **1. Provide a brief summary of your program. Please include a brief history and discuss any factors that been important to the program's development.**

  The Physics Program oversees several algebra-based and calculus-based general physics courses serving students en route to STEM. In addition, it has also developed a single descriptive course for non-science majors that includes all the general physics course content in an abridged format. All physics courses are offered with a lab counterpart, which is a requirement for transferability. The Associate for Transfer - Physics Program sprang out of the three calculus-based physics courses and has attracted relative attention from students, indicated by a sensible increase in graduations over the years.

  Students do not come to our courses because they want to major in Physics. Community College students on a pathway to STEM take physics courses as a requirement for their majors in science, engineering, or math. We have attempted to create a more inclusive and engaging environment for STEM-oriented students with the intent of establishing a clientele of students majoring in physics. One of our faculty participated in the successful NSF S STEM program as a steering committee member, and later on the selection committee. The Cal-Bridge mission of helping low-income and underrepresented minorities, especially 1st generation college students, to achieve the pinnacle of a Ph.D. in space sciences, inspired us to attempt similar bridges from middle schools to a community college. If successful, we could then help establish a pipeline from elementary school to a university anchored in low-income areas, helping change the adverse

demographics in the representation of people of color in top STEM jobs. Physics and Astronomy faculty have joined efforts in writing several grants with the ultimate goal of funding initiatives that would foster inclusive student-centered activities at EVC, leading them to acquire skills necessary to boost employability once they complete their bachelor's.

Several attempts were made by our instructors to engage students in out-of-classroom projects, sometimes in partnership with the "Honors Credit Program". To that end, we created a physical science club.

- **2. Please provide an update on the program's progress in achieving the goals (3 years) set during the last comprehensive program review.**

New and Upgraded Courses - The Program has achieved two major landmarks whose intents were communicated in the previous program review. In there, we wrote:

"Investigate the impact of reducing the number of credits (5 to 4) in each of the Physics 4-series courses..." and "Investigate the impact of changing the MATH 013 pre-requisites for the PHYS 002-series to a more rigorous college - algebra-based course..."

We are glad to state that a new PHYS 07-series has emerged, consisting of 3-h lecture and 3-h laboratory exercises, rather than the previous 4-h lecture and 3-h labs. The first course, PHYS 07A was offered in the fall of 2022 and will be followed by the other two courses - PHYS 07B, and PHYS 07C - in 2023. Consequently, the PHYS 04-series is slowly tapering down to be discontinued in Fall 2023. This reduction in credits came in handy for the growing Computer Science program and its new AS-T program.

After several years in the making, we also changed the pre-requisite to PHYS 2-series, the algebra-based sequence which now requires Math 22 or MATH 25 as a pre-requisite, rather than MATH 13. The obvious goal is to ensure that students in the classroom are capable of following the physics taught rather than struggling with basic math.

College STEM with middle schools. Bridging college academics with students attending underserved school systems is a permanent goal of the Physics program in coordination with astronomy and its outreach. This includes efforts to turn some high school students into STEM majors by completing the Certificate of Achievement in STEM (CAS).

Undergraduate Research in Community Colleges - In the previous program review we introduced the Space Technology Academy with the following language:

"*The Space and Technology Academy (STA) was conceived by a group of EVC professors as an alternative project to bring diversity to the STEM workforce, and contains elements that will set an underrepresented minority person - women, African Americans, Hispanics, and people with disabilities - on a track to a PhD....The STA connects K-14 students to forefront scientific knowledge using a collective impact framework composed of nonprofits, community college professors, academic and student programs, high school and middle school teachers, university professors, private labs, engineers and graduate students.*"

It is clear our attempt to emulate Cal-Bridge's goals of connecting similar underserved populations from CSU to UC. The STA has not materialized yet, but its momentum has yielded opportunities for students such as the California Space Grant Consortium, scattered undergraduate research done by our faculty with students either through the Honors Credit Program or informally in the advanced branch of the EVC-CSI project, and others. One of the associate physics faculty has conducted undergraduate research with students yielding presentations in scientific workshops. The ideas for courses suggested by the STA to foment undergraduate research have been imprinted into the courses ASTRO 20A/B, still in the pipeline.

- **3. Please state and recent accomplishments for your program and show how it contribute to the College's mission and success.**

Courses SLOs 100% completed - About 65% of the faculty teaching physics courses this fall are associate faculty. Again, in 2022, we will submit a request for hiring a new full-time faculty member who will lead the physics program, create connections with local universities and embrace the cause of supporting efforts to bring K12 into our program. The lack of a leading figure in Physics did not stop the semester flow of SLO assessments to the full-timers, although with constant requests and reminders sent to the associate faculty. The PHYS 04-series is being replaced by the new PHYS 07-series with a complete de-activation by fall 2023 - spring 2024. During this transitional phase, SLO assessments have been interrupted on the PHYS 04-series. We project the first cycle of SLO assessments to be closed on spring 2024 in the PHYS 07-series. As a consequence, PLO assessments have been affected by this transition given the substantial changes both the Astronomy and Physics programs have undergone. Again, given our policy of surveying SLO every semester, we expect streaming out assessments and conclusions on both programs by spring 2024.

By investing in the constant revision of four courses and programs, we provide students with access to quality courses and programs, helping to increase enrollment trends, and ensuring student success in courses that are gateways to STEM careers.

Graduation Rate - Graduation in AS-T Physics has been steady at under 20 students a term. As mentioned previously, students are not seeking our courses to major in physics, but we want to change that. We have invested in undergraduate research both in physics and astronomy with the intent of bringing students to the program through dual enrollment who might consider a STEM route, even those who are not considering community college as an option. Courses in Astrophysics such as ASTRO 020A&B provide the necessary baseline to set undergraduate research on a more formal ground in the division.

Investing in out-of-classroom activities in STEM, creating areas of integration, and networking with faculty - especially when developing planned projects, helps the college establish student-centered focus groups that will lead to increased retention and student success.

Student Retention and Student Success - Data indicate our courses have met desirable goals in completion and success. We do observe a decrease in enrollment affecting sections, especially the morning sections. At the closing of the previous program review, we held two successful morning sections/week of Algebra-based and Calculus-based courses (entry-level 0A courses), and now we offer one. The evening term has shown a slight increase in headcount. We closely follow these trends and have adjusted our offerings to accommodate students' needs.

STEM students need in-person contact to better assimilate course content and develop important skills when dealing with equipment. ***We do not favor online instruction for physics and uphold clear statements laid out in the CID descriptors***. We consider our laboratory the cusp of instruction, when concepts exposed in lectures meet real-life experiences. It is when hurdles derived from faulty equipment, human errors in data-taking, and bad interpretations of instructions, lead students to confront their frustrations and disappointment, giving instructors a unique opportunity to observe their behavior and help. Students

quite often ask for letters of recommendation, more so given that we have invested strongly in promoting internships and partnerships with 4-year institutes. For that, letters of recommendation are a must. It is in a lab set that we can observe students' behavior and highlight their skills and talents when recommending them for a position. The counterpart is: ***we require constant upgrades of lab equipment, without which, we cannot do our jobs*** successfully.

By modernizing our laboratories with adequate equipment, we are promoting not only student retention and success but giving them skills that will positively impact employability and smooth transition to the workforce.

Community Integration - Coordination with the astronomy department through the citizen science initiatives has reached higher grounds after the last program review, bringing STEM to over 30 low-income children, with the two oldest participating in the Summer Bridge Program 2022 coordinated by the MSE Division.

By supporting these initiatives, the physics program has engaged with different stakeholders promoting the pre-collegiate activities that increase our visibility in the eyes of the community at large.

- **4. If you received resource allocation for your last program review cycle, please indicate the resources you received and how these resources were utilized to impact student success and / or importance to your program. (The resources can be personnel or fiscal)**

  We did not receive the resources requested. We summarized major requests in the astronomy program review. For the physics program, major unheard requests are:

  1 - Laboratory Technician III - We currently count on 50% allocated time of a lab technician for the entire physics program. We have requested another 50% allocated time.

  2 - Full-Time Faculty - The physics courses, especially the calculus-based courses, are attended by students on a route to STEM careers and the current FTEF is 35%.

- **5. Please describe where you would like your program to be three years from now (program goals) and how these support the college mission, strategic initiatives and student success.**

  Hiring faculty and lab technicians - STEM majors must take calculus-based physics courses before taking transfer-level courses in their majors. Therefore, investing in student success and retention are priorities for the physics program. To that end, increasing the FTEF from the current 35% is a starting point to initiate a series of out-of-classroom activities that will boost student self-confidence, enlarge their view on the job market, and stretch networking with 4-year institutes. In addition, we count 50% of Lab technicians and we urge the hiring of another 50% for physics so we can improve the quality of our evening labs, as well as expand the evening sections.

  Upgrade EM Equipment - The Physics 7B laboratory (EM - Electromagnetism) requires constant upgrading to keep students up with advanced technology in the field. We would like to see our function generators upgraded to attend a plurality of input signals, currently limited to *sine* and *step* functions.

Program Set Standards (Summary Tab)

Overall, EVC's Institution Set Standard for success rate is 72%, and the aspirational goal for student success is 75%.

Success Rate (completion with "C" or better)	Program	EVC	Program Set Standard (established during last comprehensive PR)	Program Success Goal (new)
F'15-F'21 average		72.00%		

Program Success Rate 73.27%

Program Set Standard **: It is recommended that programs identify a success standard. This standard should reflect the baseline success rate.**

Program Set Standard 66%

Recommendation: **90% of the 6 year average success rate could be your program standard (average x 0.9).**

Program Success Goal **: It is recommended that programs identify a success goal. This goal should reflect the success rate to which your program aspires.**

Program Success Goal 75.00%

- **Is your program success rate higher or lower than the campus?**

  It is slightly higher.

- **If your success rate is higher than the campus, how are you helping students succeed in and outside the classroom? If your program success rate is lower, what are some strategies your program is implementing to improve?**

  Students taking physics courses have, for the most part, decided on a major and set themselves on a quest to complete their transfer and move on, therefore making them more objective and efficient. For the most part, they have better math skills and are observant of their GPA, are more cognisant of the college and its available programs.

- **Is the current program success rate higher than the program set standard?**

  The program success rate is not higher than our set goals but it lies within a reachable margin. We expect to reach our goals once a full-time faculty member is hired to lead the physics program, one that has a demonstrated record of promoting out-of-classroom projects to increase student success, developing student cohorts networking to complete projects, and others.

- **How close is the program to meeting the program success goal?**

  The program is within 2% of reaching its goal.

- **Are these measures (program set standard and program success goal) still current/accurate? If not, please describe here and reset the standards.**

  The measures are workable.

Success Rates: Measures by IPEDs Race/Ethnicity

- **American Indian: 102 - 78.380%**

  Program Average Total Enrolled
  1.000

  Program Success Rate
  40.000

- **Asian: 9380 - 79.320%**

  Program Average Total Enrolled
  138.000

  Program Success Rate
  78.060

- **Black or African American: 464 - 61.430%**

  Program Average Total Enrolled
  5.000

  Program Success Rate
  61.160

- **Hawaiin/Pacific Islander: 95 - 65.790%**

  Program Average Total Enrolled
  2.000

  Program Success Rate
  75.000

- **Latinx: 9005 - 64.730%**

  Program Average Total Enrolled
  55.000

  Program Success Rate
  63.150

- **Two or More Races: 614 - 70.030%**

  Program Average Total Enrolled
  7.000

  Program Success Rate
  70.830

- **Unknown: 1655 - 72.640%**

  Program Average Total Enrolled
  17.000

  Program Success Rate
  71.820

- **White: 1256 - 73.480%**

  Program Average Total Enrolled
  17.000

  Program Success Rate
  73.280

Success Rates: Measures by Gender

- **Female: 12340 - 73.970%**

  Program Average Total Enrolled
  88.000

  Program Success Rate
  72.100

- **Male: 10154 - 69.610%**

  Program Average Total Enrolled
  152.000

  Program Success Rate
  74.000

- **No Value Entered: 77 - 72.590%**

Program Average Total Enrolled
1.000

Program Success Rate
42.860

Success Rates: Measures by Age

- **17 & Below: 736 - 86.260%**

  Program Average Total Enrolled
  11.000

  Program Success Rate
  79.800

- **18-24: 15285 - 69.350%**

  Program Average Total Enrolled
  167.000

  Program Success Rate
  72.840

- **25-39: 4470 - 75.390%**

  Program Average Total Enrolled
  58.000

  Program Success Rate
  72.320

- **40 & Over: 2065 - 78.860%**

  Program Average Total Enrolled
  6.000

  Program Success Rate
  74.330

- **Unknown: 16 - 71.080%**

  Program Average Total Enrolled
  1.000

  Program Success Rate
  0.000

- **a. With respect to disaggregated success rates, list any equity gaps that are identified and discuss interventions your program will implement to address these equity gaps? Please include a timeline of implementation and reassessment.**

  Underrepresentation of Latinx and females in STEM - We are fortunate to oversee two programs attending different student populations. Astronomy manages descriptive courses attending non-science majors and physics manages courses attending science majors. In the former, female Latinx students are lacking and efforts were set in place prior to the last program review to tackle this issue. These statistics are not unique to EVC, or San Jose, not even California, but reflect a national problem affecting people of color who traditionally live in low-income areas. They are impacted for life by underperforming schools, and unprepared math-science teachers while sharing the pool of future 1st generation college students. The key problem is not in college courses or college structure. It is systemic.

  To address this issue, and make use of the powerful outreach capability of the Montgomery Hill Observatory, we created the EVC- Citizen Science Initiatives to establish a bridge between middle schools and colleges. Studies reveal that a student creates his professional identity in that age group. We have partnered with residents to keep this project alive for over 4 years, have assisted over 30 children, and want to make it institutional with the help of the SJECCD Foundation. More specifically, we want to reproduce at EVC or in our district, the success story of the Cabrillo Advancement Program (https://www.cabrillo.edu/cap/). To that end, we submit several grant proposals (seven to the NSF, Synopsys Foundation, and California Space Grant Consortium) to promote different aspects of this major pipeline, connecting low-income children to 4-year institutes of higher education and having community colleges as a strong connecting link.

  The National Academy of Science, Engineering, and Medicine's report on Minority Serving Institutions (2019) opens its Preface with the following statement: "*Research suggests that the cultural diversity of a nation's workforce is a key factor in its ability to innovate and compete in a global economy. This report on the role of Minority Serving Institutions (MSIs) in creating a diverse science, technology, engineering, and mathematics (STEM) workforce is motivated by the realization that the United States is unlikely to maintain its competitive advantage in STEM without the contributions that these institutions are uniquely positioned to make."* As an MSI, our college plays a pivotal role in facilitating future 1st generation college students' access to all transfer-level courses required for a major in a reasonable two or three years timeframe. To that end, our department understands that we must equip students with skills and tools to compete with peers who have navigated through well-funded K12, attended enrichment summer camps, and received other perks commonly present in high-income households. Navigating against the current euphoria of expanding all contact with students through online interaction, and given the characteristics of our courses and content, we have invested significant time and energy in creating in-person activities outside the classroom, helping students develop computer skills coding, robotics, and others. We want to expand these out-of-classroom events, but the department does not have the resources necessary.

- **b. With respect to disaggregated success rates (ethnicity / race, gender and age), discuss student performance in reaching your program set standard for student success as well as reaching the program success goal.**

  The two major groups, Latinx and Asians, have different success stories, although they reproduce national statistics. In one of our grant proposals to NSF (S STEM 2022), we noticed the following:

"The report "Women, Minorities, and Persons with Disability in Science and Technology" (NSF-NCSES, 2021) indicates that Black/African Americans, Latinx/Hispanics, and women are underrepresented in science and engineering, although constituting a significant fraction of the population: Women are 50.1%; Hispanic/Latino,18.5%; Black/African American, 13.0%; and Asian Americans 6.3%. We must improve access to STEM careers for underrepresented minorities, who are projected to make up 56% of the U.S. population by 2060 (Vespa, Armstrong, Medina, 2018). Another report examining working adults ages 25 and older (Pew Research, 2021) concludes that Latinx accounts for 17% of the U.S. workforce but only 8% of the STEM workforce. Meanwhile, Asians represent 6% of the total workforce but score high in STEM (13%), especially in Computer Science (20%) and Life & Physical Sciences (19% and 18%, respectively). African Americans account for 11% of all U.S. jobs and score even lower in Computer Science (7%) and Physical Sciences (6%). In 2014 (Lazsio, 2014), Google disclosed data on its racial and gender workforce, revealing 83% men, 60% White, and 30% Asian. The insignificant presence of Latinos (2.9%) and Blacks (1.9%) raised a call for action, pushing investments of over $150 million to overcome such a disparity. As of 2021 (Google, 2021), employment in racial and gender groups has improved - from 2.9% to 6.4 % in the Hispanic group - but the inequity is still dramatic. The tech industry, in general, shares similar data. Massive investments have been made to help businesses assemble a workforce representative of the population, but this move has not significantly impacted the intended target.

East Side San Jose (ESSJ) hosts a population of over 120,000 residents with a racial diversity of 54% of Hispanics and 36% of Asian Americans as the major ethnic groups (Niche, 2022). Although bordering Silicon Valley with companies leading the 6th largest economy globally (Tavares, 2017), 69% of the household income lies below $100,000 in one of California's most densely populated urban areas (Niche, 2022). More recently, the Silicon Valley Index report (SVI, 2022) has warned that although jobs are back to pre-pandemic levels, income inequality has widened, housing prices have risen, and inflation exploded. In this county (Santa Clara County), the U.S. Department of Housing and Urban Development (USDHUD, 2021) classifies low income for a family of four as $117,750. On the educational front, only 20% of the residents carry a Bachelor's degree or higher, and additional work is called upon to improve adult education.
And reverse the 31% non-completion of high school diplomas (Niche, 2022). The low percentage of graduates in ESSJ households (45% - Niche, 2022) hints at the significant number of future first-generation college students (FGCS) entering community college grounds in their first years."

We are dealing with a systemic issue whose solution requires facing causes lying outside our campus. For example, our academic and special programs have a "Thou shalt not pass" line at 16 years old. We are working through the EVC- CSI project to extend this threshold to embrace younger middle-schoolers, especially those who will be future 1str generation, college students. replacing the vacuum left by the lack of college-educated mentors in their households.

- **c. If your program offers course sections fully online, please contact the office of Research, Planning and Institutional Effectiveness to obtain a student success report on the online sections. Address any differences in student success rates between fully online courses and classroom courses.**

  The Physics courses cannot be offered online given their hands-on aspects.

Program Awards - If Applicable

If the classes in your program lead to a degree or certificate, please visit the DataMart and indicate how many degrees/certificates were awarded in your program: http://datamart.cccco.edu/Outcomes/Program_Awards.aspx (http://datamart.cccco.edu/Outcomes/Program_Awards.aspx)

You will need to select drop down menus and then "select program type by major of study" (for example, select Legal for paralegal studies).

Then at the bottom of the report, select the box "program type- four digits TOP", then update report to get program specific information.

Degree Type

- **AS-T**

  Number of Awards (Examine 2017-18, 2018-19 data, 2019-20 data and 2020-21 data)
  36

  Discussion
  Data indicate a fluctuation in the number of graduates, keeping it closely below 10 each year as follows:

  2017-2018, 4 graduates

  2018-2019, 6 graduates

  2019-2020, 11 graduates

  2020-2021, 8 graduates

  2021-2022, 7 graduates

Student Enrollment Types

Student Enrollment Type: Day or Evening Student

- **Day: 4639 - 50.900%**

  Program Average Headcount
  53.000

  Program Percentage of Total
  22.100

- **Day & Evening: 2929 - 32.100%**

  Program Average Headcount
  168.000

  Program Percentage of Total

70.000

- **Evening: 1022 - 11.200%**

  Program Average Headcount
  19.000

  Program Percentage of Total
  7.900

- **Unknown: 530 - 5.800%**

  Program Average Headcount
  0.000

  Program Percentage of Total
  0.000

Student Enrollment Type: Academic Load

- **Full Time: 2259 - 24.800%**

  Program Average Headcount
  93.000

  Program Percentage of Total
  38.800

- **Half Time or less than half time: 6084 - 66.700%**

  Program Average Headcount
  129.000

  Program Percentage of Total
  54.200

- **a. Discuss any changes in program enrollment types (day vs evening, full-time vs part-time) since your last program review?**

  We noticed a decrease in student enrollment during the pandemic, which still persists. Evening sections are filled faster than the morning, forcing us to reduce some calculus-based physics sections in the morning.

- **b. Discuss how do your program enrollments (Pct of total) compare to EVC?**

  As noted previously, our evening sections is by far more populated than the day sections, while compared with an average EVC, our students are more part-timers. Providing scholarships to retain students on campus and help them to complete their academic goals in two or three years has been one of our goals when writing grants.

- **c. Based on the data, would you recommend any changes?**

  1 - Prioritize hiring a full-time faculty member to oversee the physics program and create out-of-classroom initiatives to retain students and increase completion rate and success.

  2 - Prioritize hiring a 50% full-time lab technician to oversee evening and weekend labs.

  3 - Create a program similar to the Cabrillo Advancement Program to increase interest in STEM and student enrollment.

Student Demographics - Headcount

Student Demographic: Gender

- **Female: 5008 - 54.950%**

  Program Headcount
  88.000

  Program Percentage of Total
  36.670

- **Male: 4075 - 44.640%**

  Program Headcount
  151.000

  Program Percentage of Total
  63.040

- **No Value Entered: 37 - 0.410%**

  Program Headcount
  1.000

  Program Percentage of Total
  0.530

Student Demographic: Age

- **17 & Below: 486 - 5.310%**
  Program Headcount
  11.000
  Program Percentage of Total
  4.570
- **18-24: 5493 - 60.210%**
  Program Headcount
  166.000
  Program Percentage of Total
  69.010
- **25-39: 2168 - 23.800%**
  Program Headcount
  57.000
  Program Percentage of Total
  24.010
- **40 & Over: 966 - 10.600%**
  Program Headcount
  6.000
  Program Percentage of Total
  2.370
- **Unknown: 8 - 0.090%**
  Program Headcount
  1.000
  Program Percentage of Total
  0.610

Student Demographic: Race/Ethnicity (IPEDs Classification)

- **American Indian: 40 - 0.430%**
  Program Headcount
  1.000
  Program Percentage of Total
  0.470
- **Asian: 3689 - 40.480%**
  Program Headcount
  138.000
  Program Percentage of Total
  57.240
- **Black or African American: 208 - 2.290%**
  Program Headcount
  5.000
  Program Percentage of Total
  1.950
- **Hawaiian/Pacific Islander: 36 - 0.400%**
  Program Headcount
  1.000
  Program Percentage of Total
  0.600
- **Latinx: 3636 - 39.850%**
  Program Headcount
  55.000
  Program Percentage of Total
  22.940
- **Two or More Races: 248 - 2.730%**
  Program Headcount
  7.000
  Program Percentage of Total
  3.020

- **Unknown: 690 - 7.520%**

  Program Headcount
  17.000

  Program Percentage of Total
  7.150

- **White: 573 - 6.300%**

  Program Headcount
  17.000

  Program Percentage of Total
  7.340

- **a. Based on the program total headcount and percent change year to year, discuss if your program growing or declining. If so, what do you attribute these changes in enrollment to and what changes will the program implement to address them?**

  Not including post pandemic years, the enrollment has been kept constant with a majority of Asian students followed by Latinx students.

- **b. Discuss any gaps have you identified in your program. Discuss how your program enrollment is similar or different from the campus. Discuss which gender, age, and/or ethnic group are proportionally smaller than campus make up.**

  Our campus student population is led by Latinx and Asian students. However, our Physics calculus-based courses which are prereqs for computer science, engineering, and physics students - have observed a drastic drop in Latinx enrollment when compared with Asian students, meaning that Latinx students are not set on track for STEM. In fact, this reflects a national trend.

  The physics and astronomy departments have set up efforts to help revert this national trend, outreaching middle schools in low-income areas and providing their students with STEM-oriented programs. This project is termed EVC - Citizen Science Initiatives, or EVC-CSI. Our goal is to emulate here, at EVC, the Cabrillo Advancement Program which targets middle school students and provides them support through high school.

- **c. Discuss what interventions the program can implement to address any gaps in enrollment.**

  Incentivize programs such as our Division "Summer Bridge Program", which require steady funding from the college, and the EVC-CSI project, still unknown to most of our senior officers.

Institutional Effectiveness (6.5 year average, see Summary Tab)

EVC Capacity: 61.70% EVC Productivity: 14.43

Program Capacity
64.46%

Program Productivity
13.37

Is your capacity rate higher or lower then the campus?
Slightly higher

Is your productivity goal higher or lower than the campus?
Slightly lower

If the program capacity and/or productivity is lower than the campus, please provide rationale:
The WSCH indicates one point less in productivity when compared with the equivalent at EVC. We interpret this as a characteristic of the STEM courses we offer. All physics courses require a set limit on the number of students in a laboratory environment for safety reasons, primarily. In addition, we have set our labs with the goal of having students working either in pairs or alone if it is better for their learning like in circuits.

Curriculum

Related Assessments
AS-T- Created: 10/20/2021 New PLO Assessment Report Originator: Celso Batalha (/Form/Module/Index/1671)
MATH066 F2021- Created: 03/20/2022 New Section Level SLO Assessment Report Originator: Teck Ky (/Form/Module/Index/2376)
Math067- Created: 11/23/2021 New Section Level SLO Assessment Report Originator: Teck Ky (/Form/Module/Index/1887)
MATH 072 - Calculus II with Analytic Geometry Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (C-ID objectives #1 and #3)- Created: 12/07/2021 New Section Level SLO Assessment Report Originator: Sithparran Vanniasegaram (/Form/Module/Index/1997)
Math 072 SLO Assessment- Created: 12/07/2021 New Section Level SLO Assessment Report Originator: Sithparran Vanniasegaram (/Form/Module/Index/2000)
MATH 073- Created: 11/01/2021 New Section Level SLO Assessment Report Originator: Laimi Cong-Huyen (/Form/Module/Index/1774)
MATH 073- Created: 01/20/2021 New Section Level SLO Assessment Report Originator: Laimi Cong-Huyen (/Form/Module/Index/1168)
MATH 073- Created: 01/20/2021 New Section Level SLO Assessment Report Originator: Laimi Cong-Huyen (/Form/Module/Index/1169)
PHYS 07A- Created: 01/02/2023 New Section Level SLO Assessment Report Originator: Celso Batalha (/Form/Module/Index/3074)

Courses in the program
PHYS 007A - Calculus - Based General Physics for Scientists and Engineers - I - Active. Implemented on Sep 28 2021 12:00AM (/Form/Course/index/3840)
PHYS 007B - Calculus-Based General Physics for Scientists and Engineers - II - Active. Implemented on Sep 28 2021 12:00AM (/Form/Course/index/3856)
PHYS 007C - Calculus-Based General Physics for Scientists and Engineers - III - Active. Implemented on Sep 28 2021 12:00AM (/Form/Course/index/3857)
MATH 066 - Calculus I Late Transcendentals for STEM - Active. Implemented on Oct 5 2021 12:00AM (/Form/Course/index/4402)

MATH 067 - Calculus II Late Transcendentals for STEM - Active. Implemented on Jan 11 2021 12:00AM (/Form/Course/index/4197)
MATH 073 - Multivariable Calculus - Active. Implemented on Aug 31 2020 12:00AM (/Form/Course/index/4044)
MATH 071 - Calculus I with Analytic Geometry - Active. Implemented on Oct 4 2022 12:00AM (/Form/Course/index/4871)
MATH 072 - Calculus II with Analytic Geometry - Active. Implemented on Jul 23 2020 12:00AM (/Form/Course/index/3870)

- **1. Identify and updates to curriculum since the last comprehensive program review, including and new programs and indicate the 6-year timeline for scheduled course outline revision. For CTE, the time line is 2 year.**

  PHYS 4-series - The Calculus-based physics courses were redesigned with 1 less contact hour in lectures. As a result, a new PHYS 7-series has been crafted and offered in fall 2022 (PHYS 7A), followed by the entire sequence in 2023.

  PHYS 7-series - This has been developed to match most CSU and community colleges' 3h lecture and 3h laboratory. In addition, it has been developed to help create the Computer Science AS-T program, curbing the original 5-units per course offered initially by the PHYS 4A-series.

  PHYS 02A - We made significant changes by raising the math requirements to enter a PHYS 2A course. Initially, the pre-req was MATH 013, which has now been switched to MATH 22 or MATH 25.

  SLOs revised - All course SLOs have been updated and revised to improve student success.

- **2. Identify all the courses offered in the program and describe how these courses remain relevant in the discipline. For courses your program has not offered in the past two years, please discuss a plan on how to deal with these courses (if your program is not going to de-activate these courses, please explain why).**

  PHYS 02-series - It consists of PHYS 02A and PHYS 02B, bio, Medical, Kinesiology, and health care students, or those looking for a science course with a lab. The two courses are fully transferrable and have been granted CID #.

  PHYS 07-series - It consists of PHYS 07A, PHYS 07B, and PHYS 07C courses, serving all students majoring in STEM. It is a gateway to courses attending their respective majors: computer science, engineering, mathematics, biology (STEM), and Physical Sciences. The three courses are fully transferrable and have been granted CID #.

  PHYS 001 - It is a single science GE course for students looking for a science course with a lab.

- **3. If you have a degree or certificate, please include a diagram of your program's guided pathways program map. (A program map indicates courses suggested for each semester, across two years, upon completion a student would qualify for a degree/certificate).**

  AS-T Physics - This program has been designed as a landmark for students en route to a STEM major. As a necessary stopping point, we thought students would take advantage given by an AS- T degree and complete it along with their major courses or programs. Students graduating in the AS-T are not physics majors in their last majority.

Term 1	Units	CSU GE	IGETC FOR CSU	NOTES
MATH 066 or MATH 071	4 - 5	B4	2A	CORE
ENGL 001A	3	A2	1A	
GE	3	B2	5B	
GE	3	C1	3A	
GE	3	E	Transferable Electives	
Total Units	**16 - 17**			

Term 2	Units	CSU GE	IGETC for CSU	NOTES
MATH 067 or MATH 072	4 - 5			CORE
PHYS 007A	4	B1/B3	5A/5C	CORE Based on C-ID equivalency, PHYS 004A is an acceptable alternative to PHYS 007A
GE	3	A1	1C	
GE	3	C2	3B	
Total Units	**14 - 15**			

Term 3	Units	CSU GE	IGETC for CSU	NOTES
MATH 073	5			CORE

PHYS 007B	4			CORE Based on C-ID equivalency, PHYS 004B is an acceptable alternative to PHYS 007B
GE	3	A3	1B	
GE	3	D	4	US-1, US-2, U-S3*
Total Units	**15**			

- **4. Identify and describe innovative strategies or pedagogy your department/program developed/offered to maximize student learning and success. How did they impact student learning and success?**

  Videos of Lab exercises - During the pandemic, faculty invested significant time in video-capturing all key lab experiments currently used by adjuncts when teaching these labs.

  Physlet Simulations - During the pandemic, faculty created Canvas-based assignments using the award-winning simulations Physlet. Some faculty still use these assignments for extra credit or in-class activities.

  Technology in the classroom - Some instructors have introduced "Interactive Classroom" software to enhance student performance and success. Not all the in-person sections use it, but we have encouraged all our instructors to adopt it. In particular, we purchased a subscription to the "ClassPoint.io" software.

- **5. Discuss plans for future curricular development and/or program degrees & certificates included) modification.**

  We do not have plans to expand our physics curriculum. We do want to improve its current delivery once another full-time faculty member is hired.

- **6. Describe how your program is articulated with High School Districts, and/or other four year institutions. (Include articulation agreements, CID, ADTs...)**

Student Learning Outcome and Assessment

Related Assessments
AS-T- Created: 10/20/2021 New PLO Assessment Report Originator: Celso Batalha (/Form/Module/Index/1671)
MATH066 F2021- Created: 03/20/2022 New Section Level SLO Assessment Report Originator: Teck Ky (/Form/Module/Index/2376)
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MATH 072 - Calculus II with Analytic Geometry Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (C-ID objectives #1 and #3)- Created: 12/07/2021 New Section Level SLO Assessment Report Originator: Sithparran Vanniasegaram (/Form/Module/Index/1997)
Math 072 SLO Assessment- Created: 12/07/2021 New Section Level SLO Assessment Report Originator: Sithparran Vanniasegaram (/Form/Module/Index/2000)
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MATH 073- Created: 01/20/2021 New Section Level SLO Assessment Report Originator: Laimi Cong-Huyen (/Form/Module/Index/1169)
PHYS 07A- Created: 01/02/2023 New Section Level SLO Assessment Report Originator: Celso Batalha (/Form/Module/Index/3074)

Student Learning Outcomes
MATH 066 - Calculus I Late Transcendentals for STEM - Compute and interpret limits of a function using analytic and other techniques when they exist; when limits do not exist, give reasons why for their non-existence. (Rejected)
MATH 066 - Calculus I Late Transcendentals for STEM - Compute and interpret limits of a function using analytic and other techniques when they exist; when limits do not exist, give reasons why for their non-existence. (Active)
MATH 066 - Calculus I Late Transcendentals for STEM - Compute derivatives using limit, differentiation formulas, and implicit differentiation. (Rejected)
MATH 066 - Calculus I Late Transcendentals for STEM - Compute derivatives using limit, differentiation formulas, and implicit differentiation. (Active)
MATH 066 - Calculus I Late Transcendentals for STEM - Apply the definition of continuity to determine whether or not a function is continuous at a real number. (Active)
MATH 066 - Calculus I Late Transcendentals for STEM - Apply the definition of continuity to determine whether or not a function is continuous at a real number. (Rejected)
MATH 066 - Calculus I Late Transcendentals for STEM - Apply differential calculus to sketch the graph of a function, to obtain the equation of the tangent line to a function, and to solve applications such as optimization and related rate problems. (Rejected)
MATH 066 - Calculus I Late Transcendentals for STEM - Apply differential calculus to sketch the graph of a function, to obtain the equation of the tangent line to a function, and to solve applications such as optimization and related rate problems. (Active)
MATH 066 - Calculus I Late Transcendentals for STEM - Evaluate the definite integral using the limit of Riemann Sum, and using the Fundamental Theorem of Calculus. (Active)
MATH 066 - Calculus I Late Transcendentals for STEM - Evaluate the definite integral using the limit of Riemann Sum, and using the Fundamental Theorem of Calculus. (Rejected)
MATH 066 - Calculus I Late Transcendentals for STEM - Use the definite integral to find areas and volumes. (Rejected)
MATH 066 - Calculus I Late Transcendentals for STEM - Use the definite integral to find areas and volumes. (Active)
MATH 067 - Calculus II Late Transcendentals for STEM - Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (Active)
MATH 067 - Calculus II Late Transcendentals for STEM - Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (Historical)
MATH 067 - Calculus II Late Transcendentals for STEM - Find the derivative of transcendental functions. (Historical)
MATH 067 - Calculus II Late Transcendentals for STEM - Find the derivative of transcendental functions. (Active)

MATH 067 - Calculus II Late Transcendentals for STEM - Evaluate indeterminate forms using l'Hospital's Rule. (Active)
MATH 067 - Calculus II Late Transcendentals for STEM - Evaluate indeterminate forms using l'Hospital's Rule. (Historical)
MATH 067 - Calculus II Late Transcendentals for STEM - Apply integrals and differential equations to problems such as volumes, arc length of a curve, area of a surface of revolution, center of mass, and population dynamics. (Historical)
MATH 067 - Calculus II Late Transcendentals for STEM - Apply integrals and differential equations to problems such as volumes, arc length of a curve, area of a surface of revolution, center of mass, and population dynamics. (Active)
MATH 067 - Calculus II Late Transcendentals for STEM - Apply divergence and convergence tests to sequences and series, and represent functions as power series using different techniques including the Taylor theorem. (Active)
MATH 067 - Calculus II Late Transcendentals for STEM - Apply divergence and convergence tests to sequences and series, and represent functions as power series using different techniques including the Taylor theorem. (Historical)
MATH 067 - Calculus II Late Transcendentals for STEM - Graph and analyze functions in polar and parametric forms, and solve problems by differentiating and integrating such functions. (Historical)
MATH 067 - Calculus II Late Transcendentals for STEM - Graph and analyze functions in polar and parametric forms, and solve problems by differentiating and integrating such functions. (Active)
MATH 072 - Calculus II with Analytic Geometry - Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (Active)
MATH 072 - Calculus II with Analytic Geometry - Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (Rejected)
MATH 072 - Calculus II with Analytic Geometry - Evaluate definite, indefinite, and improper integrals using a variety of integration formulas and techniques. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Apply integrals and differential equations to problems such as areas, volumes, arc lengths, work, and population dynamics. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Apply integrals and differential equations to problems such as areas, volumes, arc lengths, work, and population dynamics. (Rejected)
MATH 072 - Calculus II with Analytic Geometry - Apply integrals and differential equations to problems such as areas, volumes, arc lengths, work, and population dynamics. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Apply integrals and differential equations to problems such as areas, volumes, arc lengths, work, and population dynamics. (Active)
MATH 072 - Calculus II with Analytic Geometry - Graph and analyze functions in polar and parametric forms, and solve problems by differentiating and integrating such functions. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Graph and analyze functions in polar and parametric forms, and solve problems by differentiating and integrating such functions. (Rejected)
MATH 072 - Calculus II with Analytic Geometry - Graph and analyze functions in polar and parametric forms, and solve problems by differentiating and integrating such functions. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Graph and analyze functions in polar and parametric forms, and solve problems by differentiating and integrating such functions. (Active)
MATH 072 - Calculus II with Analytic Geometry - Apply divergence or convergence tests to sequences and series, and represent functions as power series using different techniques including the Taylor theorem. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Apply divergence or convergence tests to sequences and series, and represent functions as power series using different techniques including the Taylor theorem. (Rejected)
MATH 072 - Calculus II with Analytic Geometry - Apply divergence or convergence tests to sequences and series, and represent functions as power series using different techniques including the Taylor theorem. (Historical)
MATH 072 - Calculus II with Analytic Geometry - Apply divergence or convergence tests to sequences and series, and represent functions as power series using different techniques including the Taylor theorem. (Active)
MATH 073 - Multivariable Calculus - Perform vector operations including vector addition, scalar multiplication, the dot product, and the cross product to find triple products, projections, and the equations of lines, curves, planes and surfaces in space. (Active)
MATH 073 - Multivariable Calculus - Perform vector operations including vector addition, scalar multiplication, the dot product, and the cross product to find triple products, projections, and the equations of lines, curves, planes and surfaces in space. (Historical)
MATH 073 - Multivariable Calculus - Analyze multivariable functions and space curves including their graphs; find level curves and level surfaces; find velocity and acceleration pertaining to motion in space; find the arc length and curvature of a curve; and find the unit tangent, unit normal, and unit binormal vectors for a space curve. (Historical)
MATH 073 - Multivariable Calculus - Analyze multivariable functions and space curves including their graphs; find level curves and level surfaces; find velocity and acceleration pertaining to motion in space; find the arc length and curvature of a curve; and find the unit tangent, unit normal, and unit binormal vectors for a space curve. (Active)
MATH 073 - Multivariable Calculus - Determine differentiability; find limits, partial derivatives, directional derivatives, gradient vectors, and differentials of multivariable functions; and find an equation of the tangent plane to a surface at a given point. (Active)
MATH 073 - Multivariable Calculus - Determine differentiability; find limits, partial derivatives, directional derivatives, gradient vectors, and differentials of multivariable functions; and find an equation of the tangent plane to a surface at a given point. (Historical)
MATH 073 - Multivariable Calculus - Find global extrema of a continuous multivariable function on a closed and bounded set; apply the second derivative test to find local extrema and saddle points; and apply the Lagrange multiplier method to solve constrained optimization problems. (Historical)
MATH 073 - Multivariable Calculus - Find global extrema of a continuous multivariable function on a closed and bounded set; apply the second derivative test to find local extrema and saddle points; and apply the Lagrange multiplier method to solve constrained optimization problems. (Active)
MATH 073 - Multivariable Calculus - Set up and evaluate double integrals in rectangular and polar coordinates and triple integrals in rectangular, cylindrical, and spherical coordinates; apply the change of variables theorem for multiple integrals; and apply multiple integration to find volumes, surface areas, centers of mass, moments of inertia, and probabilities using joint probability density functions. (Active)
MATH 073 - Multivariable Calculus - Set up and evaluate double integrals in rectangular and polar coordinates and triple integrals in rectangular, cylindrical, and spherical coordinates; apply the change of variables theorem for multiple integrals; and apply multiple integration to find volumes, surface areas, centers of mass, moments of inertia, and probabilities using joint probability density functions. (Historical)
MATH 073 - Multivariable Calculus - Determine whether a vector field is conservative; find a potential function for a conservative vector field; find the divergence and curl of a vector field; evaluate line integrals using parameterized curves; evaluate surface integrals using parameterized surfaces; and apply the Fundamental Theorem for Line Integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem to a variety of science and engineering examples. (Historical)
MATH 073 - Multivariable Calculus - Determine whether a vector field is conservative; find a potential function for a conservative vector field; find the divergence and curl of a vector field; evaluate line integrals using parameterized curves; evaluate surface integrals using parameterized surfaces; and apply the Fundamental Theorem for Line Integrals, Green's Theorem, Stokes' Theorem, and the Divergence Theorem to a variety of science and engineering examples. (Active)

PHYS 007A - Calculus - Based General Physics for Scientists and Engineers - I - Predict the position and velocity of an object moving through space and subject to a range of conservative and nonconservative forces. (Draft)
PHYS 007A - Calculus - Based General Physics for Scientists and Engineers - I - Predict the dynamic evolution of a system subject to an arrangement of conservative and conservative forces. (Draft)
PHYS 007A - Calculus - Based General Physics for Scientists and Engineers - I - Report the uncertainties of physical quantities unveiled in lab exercises, with special care on displaying reasonable number of significant figures. (Draft)
PHYS 007A - Calculus - Based General Physics for Scientists and Engineers - I - Apply the principles of work, energy and momentum conservation in situations involving the motion of bodies in two or three dimensions, in interacting spinning systems, and in fluid dynamics. (Draft)
PHYS 007A - Calculus - Based General Physics for Scientists and Engineers - I - Develop an original project that illustrates principles or laws of classical mechanics, including public presentation of such project. (Draft)

Program Learning Outcomes
Physics - Associate in Science for Transfer: Associate in Science for Transfer - Identify all of the physical quantities in a problem, and define the steps to model and solve real world problems (Draft)
Physics - Associate in Science for Transfer: Associate in Science for Transfer - Use inductive and deductive reasoning to analyze evidence to arrive at logical conclusions (Draft)
Physics - Associate in Science for Transfer: Associate in Science for Transfer - Demonstrate proficiency in assembly of experimental apparatuses to conduct and analyze measurements of physical phenomena (Draft)
Physics - Associate in Science for Transfer: Associate in Science for Transfer - Assess experimental uncertainty to aid in making meaningful comparisons between experiment and theory (Draft)

- **1. On the program level, defined as a course of study leading to degree or certificate, list the Program Learning Outcomes (PLOs), and how they relate to the GE/ILOs. Please also indicate how the course SLOs have been mapped to the PLOs. If you are completing this program review as a department or discipline and do not offer any degrees or certificates, please write N/A in this space.**

  The AS-T Physics constitutes an opportunity for STEM students to highlight/synthesize their undergraduate achievements into an award. We are not necessarily expecting students from this program to become physicists or have students attracted to it because they seek an academic career in physics. Here are listed the PLOs:

  Identify all of the physical quantities in a problem, and define the steps to model and solve real world problems

  ILO mapping: Inquiry and Reasoning

  Use inductive and deductive reasoning to analyze evidence to arrive at logical conclusions

  ILO mapping: Communication, Inquiry, and Reasoning

  Demonstrate proficiency in assembly of experimental apparatuses to conduct and analyze measurements of physical phenomena

  ILO mapping: Communication, Inquiry, and Reasoning

  Assess experimental uncertainty to aid in making meaningful comparisons between experiment and theory

  ILO mapping: Inquiry and Reasoning

- **2. Since your last program review, summarize SLO assessment activities and results at the course and program level. Please include dialogue regarding SLO Assessment results with division/department/college colleagues and/or GE areas. Provide evidence of the dialogue (i.e. department meeting minutes or division meeting minutes, etc.) List any SLOs or PLOs that have not been assessed in the last two years and provide an explanation of why they have not been assessed. This will be reviewed by the IEC to determine if your Program Review is approved or not.**

  SLO assessed - The PHYS 2-series and PHYS 001 courses have been assessed and recycled, and we are committed to attempting surveying every semester. It is a daunting task, though, given that the majority of physics courses are taught by associate faculty.

  SLO not assessed -The last program review identified the need to reduce the number of weekly hours from 4 h / week to 3 h/ week, so we stopped collecting assessments early in 2022 as we expect to taper down on the offering of these course sequences. At the same time, we worked to approve the PHYS 07 sequence, with the first course offered in fall 2022. We plan on collecting its SLOs this fall and every semester after. These calculus-based physics courses are core courses for the AS-T program, and so we are lacking in their PLO assessment.

  AS-T Program not assessed - With new core courses as part of this program, with the newest being offered in fall 2023, we expect to complete the first cycle of PLOs assessment in fall 2023.

- **3. What plans for improvement have been implemented to your courses or program as a result of SLO assessment? Please share one or two success stories about the impacts of SLO assessment on student learning.**

  Besides upgrading lab equipment and technology inside the classroom, we expect to improve our physics program when the middle school-college connection bridge is successfully implemented through a program similar to the Cabrillo Advancement Program. In addition, we are seeking to hire a full-time physics faculty who can lead the growth of this program by implementing out-of-the-classroom activities such as those the astronomy department has planned in its area of expertise. .

Faculty and Staff

Part D: Faculty and Staff

- **1. List current faculty and staff members in the program, areas of expertise, and describe how their positions contribute to the success of the program.**

1. ***Batalha, Celso*** – He has worked with Mike Masuda updating course outlines, SLOs, and PLOs, overseeing SLO assessments and their analytics, and introducing a variety of teaching modalities to attend to different students' learning skills. Still, with Mike Masuda, they visited instructors' classrooms and submitted student evaluations for Dean's consideration. Celso has introduced significant modifications to his online asynchronous course to improve students' browsing and communication. In addition, he has attempted to initiate several out-of-classroom activities, including undergraduate research with community college students, which has led to independent study types of courses, ASTRO 20A &20B, currently in CurriQunet pipeline. Most of his drive is directed toward connecting low-income middle-schoolers from underserved school systems to an environment that is college-oriented. As a result, he has worked with community members organizing a branch of the EVC-CSI project that bridges EVC faculty and students to these middle schoolers. Lastly, he has engaged with faculty and the EVC Academic Senate to create a science museum on the "27 acres" of land belonging to the district.
2. ***Duong, Van*** - Instructional Laboratory Technician III at Evergreen Valley College (2007 – present) for two departments, Physics (50%) and Chemistry (50%). Her position contributes to program success in the Physics department as follows: She has primary responsibility for ensuring that laboratories run smoothly and safely. Determine, prepare, and provide materials for laboratory experiments and instructor demonstrations. Assist instructors as problems arise. Familiarize new instructors with our facilities and procedures. Oversee lab safety and security. Manage hazardous waste disposal. Help maintain equipment. Support faculties with promoting our programs, including STEM program, Summer Reach, and California Space Grant. Purchase materials, supplies and equipment; deal closely with the Business Office and the Purchasing departments. She maintains department supply budgets and grant budgets. Join the Hiring committee to hire new staff and faculty. She is also a member of the Classified Senate Committee.
3. ***Francisco, Ricardo*** - The Astronomy program has been successful in its student-centered and outreach initiatives due to the dedicated work of Mr. Ricardo Francisco, currently supported by a grant. Rick is an Instructional Laboratory Technician III, Evergreen Valley College (2017-present), and a former volunteer at the Astronomy department (2015-2017). Assist instructors in planning and setting up laboratories and demonstration equipment for the instructors. Perform annual maintenance of the MHO two observatory buildings, Dome, and Roll of Roof mechanical and electrical systems. Assemble instruments on telescopes and service them, clean and sanitize all used optical eyepieces and hand control pads. He also oversees software updates on all astronomical applications controlling the mounts. Host and support MHO/EVC Astronomy outreach program, and schedule monthly public stargazing events via our Meetup website. We have over 1,500+ members. Support the special faculty programs, California Space Grant, Summer Outreach, STEM, and special Astronomical events and talks. He is a member of the MS3 Emergency Floor Captain team and performs an annual inventory of all astronomy equipment, notifying all instructors of new equipment or software.
4. ***Masuda, Michael*** - Professor Masuda (MS Physics, BS Physics: Lasers & Optics, BS: Condensed Matter Physics) is a physics and astronomy instructor whose expertise is in utilizing physical demonstrations whenever possible to help students visualize concepts in physics and astronomy. During the 2020 pandemic and lockdown, he spent a few months outside of class recording video footage of lab equipment to be used as video data for the student analysis in physics and astronomy labs. He was also the first to suggest using an inexpensive diffraction grating filter to use the telescopes as astrometric spectrometers in lieu of the availability of funds for the desired $30,000 spectrometer--a filter that can be used to produce the visible absorption spectrum of stars and galaxies towards the development of future astronomy course labs. He has also become proficient with a digital telescope called the Unistellar EVscope--which he has successfully utilized at the Observatory with a large screen monitor to show local visitors a host of deep sky objects too faint to be seen with normal optical telescopes. In the past, Mike has served as faculty advisor for the EVC Physical Science Club--whose members have volunteered alongside him at the campus Montgomery Hill Observatory during their monthly public Night Sky viewing events. He is also hoping to develop in the near future a zero-credit course for senior members of the local community who are interested in amateur astronomy and telescopes. In regards to the future EVC STEAM museum (originally just a natural science museum but has evolved to include other disciplines and interests in STEAM), he has proposed a novel approach to the proposed planetarium--a PROJECTORLESS planetarium, where the walls, floor, and ceiling have flexible UHD 8K LED screens, similar to the ones used by Lucasfilm for their backdrops in their TV shows. This virtual reality room may serve as a multipurpose system where lecturers of other disciplines can also come in and use the room to dynamically float through an excavation site, fly over a natural biome, rotate the night sky (planetarium), or some other scenic vista footage for educational purposes. It will not have a projector in the center of the room--allowing more flexibility in use. It could also be used by art students to create their own virtual realities, by performing arts faculty to provide realistic moving stage backdrops--the uses are endless, and he is hoping to ask for more than one of these rooms so that a single room will not be overbooked!

In addition to fulfilling their contract jobs, this team of physics and astronomy departments has invested significant time and energy in partnering with the community of residents to create the EVC - Citizen Science Initiatives, intending to connect middle schools in low-income areas to college grounds. We are listing some of their achievements so far.

The EVC Citizen Science Initiatives, Bridging Middle School and College -This crew, making up the core personnel of the Astronomy and Physics departments, have invested intense efforts over the years to help tackle the equity gap in education, leading to a society where different racial groups have a share of the wealth of this nation representative of their population. Elementary and secondary education in science and math serve as a basis for student entry into STEM majors at the college level. However, racial and ethnic disparities in access to upper-level math and science courses and student achievement in STEM are persistent barriers contributing to the small number of underrepresented minorities in STEM. In April 2018, James Lick High School (JLHS), a feeder school for EVC, in which 97% of the student body is a minority and 84% is economically disadvantaged, proposed cutting the school's physics program for the upcoming academic year. Consequently, parents would be faced with the choice of enrolling their child in a further out "wealthier" school or jeopardizing their child's acceptance into college as all University of California campuses recommend students have three core years of science, one of which is traditionally physics. The school leadership's decision to cut physics brought to light an alarming equity issue in the otherwise vibrant and wealthy Silicon Valley. The northern California chapter of the American Association of Physics Teachers intervened by writing petitions against the decision and coordinated a transitional stage where EVC would provide laboratory classes and oversee instruction. Due to the collaboration and activism of a caring community, the school's decision was reversed, and a substitute teacher was hired to lead the program. While the initial aim was to save physics classes at JLHS, a core group of educators, parents, and community members have continued to work to reduce the STEM achievement gap by creating programs that will ensure students have equal access and outcomes in STEM. Moreover, through a shared vision and partnership, we saw how a small group of people could spur significant and ongoing change.

Researchers suggest that a child's decision to enter a specific career or field of study happens in middle school, thereby highlighting the need for effective interventions at an early age to reverse negative perceptions about STEM in general and math in particular. The EVC-CSI program was designed to 1) engage minority and low-income children in STEM at an early age, 2) provide mentorship and weekly interactions designed to expose the participant to the joys of science, math, and technology supervised by college professors, and 3) establish a familial relationship with the children, following their academic development throughout the years up to college.

The establishment of bridges linking middle school to college is considered fundamental to bringing equity to education and promoting changes in the demographics we currently observe in our calculus-based physics courses, gateways to advanced STEM programs.

The California Space Grant Consortium - As a measure to improve student success and retention at EVC, we applied for several grants, with the CaSGC resulting in a positive outcome. It is a consortium between NASA and UCSD, providing cohorts of twelve EVC low-income students with the opportunity to learn robotics and exercise teamwork to produce results. We were awarded on three consecutive terms and await to begin on the next cohort in spring 2023.

Department members have received awards in recognition for the efforts done towards equity in education:

- "Bridges to Diversity and Equity." Award in 2021 by Dr. Byron Breland, the former San Jose Evergreen Community College District Chancellor.
- "Multicultural Astronomy: Stars of Many Colors." Award in 2021 from Dr. T. Gilkerson, EVC President Humanizing Curriculum and Instruction

- **2. In addition to major professional development activities completed by faculty and staff in the past, in particular with regards to students' success, equity, distance education, SLO assessment, guided pathways and/or innovative teaching/learning strategies, are there any additional professional development needs of your department in the future? What are they? Please provide details about a timeline.**

Faculty teaching DE should attend recycling workshops every two years and be compensated for.

Budget Planning

Part E: Budget Planning

- **1. With your Dean, review the department Fund 10 budget (operational budget) and discuss the adequacy of the budget in meeting the program's needs.**

Three programs share one single budget, and we request these departments to be divided, given that we are currently writing three independent Program Reviews. Physics provides STEM core courses, Astronomy provides GE courses primarily, and Physical Sciences is just one course. If divided, each department's leading faculty would have an independent budget to better plan their department's future growth. As of 2022, these are the funds allocated to the three programs:

2021-2022 operation budget for Physics, Astronomy, and Earth Science:

Physics, Astronomy & Earth Science (1902)

GL Account	Description	Budget	
17-21-1902-22500-54100	Supplies Instruction	$4,315.00 ($2,873.00 – Physics; $1,442.00: Astronomy).	
10-21-1902-00000-55200	Conference	$120	(Transferred to Supplies non-instruction and Postage for Physics needs)

- **2. List all external funds, i.e. fund 17, the department/program receives, and describe their primary use.**

10-25-1902-00000-55620	Repair	$500	(to send broken function generators to vendor to be repaired)
17-25-1902-10506-56411	HERRF Fund	$3,923.23	(Use all for Physics)

External funds have been received from small grants such as California Space Grant Consortium, Synopsys Foundation, and scattered donations used to support our growing out-of-classroom and K12 projects. Total deposits made on an SJECCD Foundation account are uploaded at the end of this report.

Technology and Equipment

Part F: Technology and Equipment

- **Review the current department technology and equipment needed and assess program adequacy. List and changes to technology or equipment since the last program review. If changes were made please indicate how the change impacted student success.**

Three departments manage laboratories in astronomy, physics, and geology (for Earth Sciences). As such, they must share a budget of under $10,000 to replace malfunctioning parts, test new lenses, and purchase small parts for the geology labs. The budget IS NOT sufficient to implement significant upgrades to equipment. For instance, physics needs to modernize its functions-generators and oscilloscopes, as some start malfunctioning during labs. We purchased one for testing, but we do not have the budget to purchase 15 units to attend to our students in the lab (they work in pairs, and the lab supports 28 students). In addition, we want to expand our out-of-classroom project on robotics and run it each year, not depending on external fund sources such as is currently supplied by the California Space Grant Consortium (CaSGC). To run this program efficiently, we need to compensate a faculty coordinator for supervising projects of 15 students per term as a non-instruction assignment corresponding to 60 h per term (Feb/Mar/Apr/May/Jun and Aug/Sep/Oct/Nov/Dec). We expect this to solidify students' interests in STEM, boost their self-confidence, and enhance their networking within the college.

This one-time investment (new function generators) and a robotic program are summarized in the table below:

# of items	Description	Price/ea.	Tax + Shipping	Total
15	Oscilloscope InfiniiVision 1000X-Series, 2Ch, 50 Mhz (Part#: EDUX1052A)	$559.60	$1,259.00	$9,65

30	SparkFun Electronics (Arduino) (Part#: 1568-KIT-15267-ND) /year	$106.95	$481.28	$3,68
1	NIA for faculty overseeing the robotic program	$88.95	NA	$5,33
1	Dremel DigiLab 3D45-EDU 3D Printer Bundle	$2,188.47	$1,969.62	$15,1
1	HP 24" all- in- one Desktop Computer (Staple Item #: 24506597|Model #: 1J7Q6AA#ABA)	$839.99	$755.991	$5,795
30	3D Printer filament			

Additional Information

Part G: Additional Information

- **Please provide any other pertinent information about the program that these questions did not give you an opportunity to answer.**

  In this report, we have stressed the hiring of a full-time faculty member for the physics program alone, since the current two full-time faculty invest most of their load in the astronomy program essential, an equivalent of 35% FTEF. In addition, physics has the potential to expand out-of-classroom activities that are essential for boosting confidence, building networks with 4-years institutions, developing computer coding skills, and so many other traces necessary for a successful career in STEM. Astronomy has a robust outreach and out-of-classroom activity, and we want to initiate that in physics. For that, it is crucial to hire a capable instructor who will expand the program.

Future Needs and Resource Allocation Request

Based on the areas noted below, please indicate any unmet needs for the program to maintain or build over the next Comprehensive Review. Please provide rationale on how the request connects back to SLO/PLO assessment, strategic initiatives or student success. If no additional requests are needed in any of the areas, put N/A.

1. **Classified Professional Request**

   Ongoing Budget Needs
   Hiring of an Instructional Lab Techinican for Physics at a 50% load. Our current lab technician allocated to physics fills, 50% load, leaving unsttende labs that are offered in the morning hours.

   One-Time Expenditure
   21260

   Total Expenses (Staffing and Faculty Requests include Salary and Benefits)
   72680.000

   Request linked to SLO/PLO #
   PLO # 1, 2, 3, 4, 5

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

2. **Faculty Request**

   Ongoing Budget Needs
   Full time Faculty who can lead core physics courses and expand the program to increase student retention and success

   One-Time Expenditure

   Total Expenses (Staffing and Faculty Requests include Salary and Benefits)
   161941.000

   Request linked to SLO/PLO #
   PLO # 1, 2, 3, 4

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

3. **Equipment/Supplies**

   Ongoing Budget Needs
   8100

   One-Time Expenditure
   21260

   Request linked to SLO/PLO #
   PLO # 1, 2, 3, 4, 5

   Strategic Initiatives (student centered, organizational transformation, community engagement)
   Yes

   Improving student success rates
   Yes

   Achievement of program set standard for student success
   Yes

Total Cost
Classified Professional Request
Ongoing Budget Needs: Hiring of an Instructional Lab Techinican for Physics at a 50% load. Our current lab technician allocated to physics fills, 50% load, leaving unsttende labs that are offered in the morning hours.
One-Time Expenditure: 21260
Total Expenses (Staffing and Faculty Requests include Salary and Benefits): 72680.000
Faculty Request
Ongoing Budget Needs: Full time Faculty who can lead core physics courses and expand the program to increase student retention and success
One-Time Expenditure:
Total Expenses (Staffing and Faculty Requests include Salary and Benefits): 161941.000
Equipment/Supplies
Ongoing Budget Needs: 8100
One-Time Expenditure: 21260
Total Expenses (Staffing and Faculty Requests include Salary and Benefits):

Attach Files

Attached File
EVC Account 198880. pdf.pdf (/Form/Module/_DownloadFile/3021/43425?fileId=289)

Copy of SLO Status for ASTRO PHYS and PHYSC 29Nov2022.xlsx (/Form/Module/_DownloadFile/3021/43425?fileId=290)

IEC Reviewers

IEC Mentor
Robert Brown

IEC Second Reader
Fahmida Fakhruddin

All Fields

Student Services Comprehensive Program Review: Comprehensive Student Life Program Review- 2023/2024

Main

Program Review Year
2024

Division
Student Service Area

Department
Student Life

Subject

Overview
Department/Program Name Comprehensive Student Life Program Review- 2023/2024

Year of Last Comprehensive Review Fall 2018

Year of Last Mini Review, if applicable

Preparer's Name Johnson, Raniyah

Area Dean Howard Willis

Co-Contributors

*Co-Contributor must be chosen before proposal is launched

- Willis, Howard

Overview of the Department/Program

Evergreen Valley College guides all students to pathways that reach their educational and career goals through equity-centered, innovative academic programs and support services. By creating a learning environment where everyone feels welcomed and supported, we are committed to a culture of inquiry, growth, and respect that creates an equitable society in which all can participate and prosper.

1.Student-Centered: We provide access to quality and efficient programs and services to ensure student success.

- **Access**
- **Curriculum and programs**
- **Services**

2. Community Engagement: We will transform the college image and enhance partnerships with community, business and educational institutions.
Areas of focus are:

- **Increase visibility**
- **Develop strategic partnerships**
- **Building campus community**

3.Organizational Transformation: We create a trusting environment where everyone is valued and empowered.
Areas of focus are:

- **Communication**
- **Employee development**
- **Transparent Infrastructure**

- **1. Provide a brief summary of your program, including program components, function and purpose. Please include a brief history and discuss any factors that have been important to the program's development.**

The Mission of the Office of Student Life (OSL) is to provide and support quality student life services through a DEI lens by empowering students to achieve their academic, career, and personal goals. Through the promotion of opportunities and experiences beyond the classroom that encourage learning and student success on campus, the Office of Student Life provides a link between students' classroom experiences to activities outside of the classroom:

- To provide learning experiences that stimulates and encourages social, cultural, intellectual and recreational interactions.
- To encourage services, programs, and events to educate, advocate, entertain and challenge our students understanding of the world around them.
- To provide students the necessary tools and resources for their individual and student organization success as well as supports student advocacy efforts.

The Office of Student Life exists to create a unique student-life experience exclusive to Evergreen Valley College. The Office of Student Life works to have all EVC students understand their power to transform their lives and communities. We strive to provide a welcoming campus environment that supports student recruitment, retention, and the achievement of academic and career goals. We oversee and assist in developing activities, events, and programs designed for the social, cultural, educational, and leadership development of students, basic needs resources that support the retention of students, student's rights and resources through the student grievance process and Title IX, and opportunities for restorative justice through the Student Code of Conduct Process.

The Office of Student Life's program's development continues to be shaped by existing legislation and the students' and community's cultural and personal needs. The Office of Student Life encompasses several areas on campus: Basic Needs, Campus Safety and Title IX, Student Rights and Grievance oversight, Student Misconduct, Diversity and Equity Initiatives, LGBTQ+ Support and Resources, EVC Associated Student Government, student organizations, campus activity scheduling and coordination, freedom of expression campus liaison, leadership development program, civic engagement opportunities, community partnerships, and outreach and retention.

Program Goals

The goals of the Office of Student Life are as follows:

- Develop student leadership programs on EVC's Campus
- Develop services and educational experiences that promote student success and development.
- Build a strong and equitable campus community.
- Establish and support student organizations.
- Provide cultural, multicultural, recreational, social, and civic engagement programs and resources

- **2. Please provide an update on the program's progress in achieving the goals (3 years) set during the last comprehensive program review.**

Three goals were set during the last comprehensive program review:

Goal 1: Develop services and educational experiences that promote student success and development. OSL develops services and educational experiences that promote student success and development. Over the past three years, OSL worked to increase opportunities for co-curricular programs, activities, and services to promote student learning and success. Through these efforts, OSL has emphasized skill development, created inclusive environments where students can explore their identities and celebrate diversity, and prepare for future endeavors. OSL completed the following opportunities to develop critical thinking skills throughout the student leadership experience.

Team Building and Training

Student Leaders improve cooperation and communication skills, while developing critical thinking skills in the following training:

- Solving problems and making decisions.
- Student Representation and Committee Training. Students Gain knowledge about committee system and structure, understand the multiple layers and nuances of serving on committees, acquire skills related to meeting etiquette, learn about the variety of meeting structures and how a room set up, location, or personal style can impact the outcomes of a committee, and gain knowledge about how to report committee actions and work back to their campus-based governance system.
- ASG training and developing an understanding the history of the body and its creation, basic function, and responsibilities.

Empowerment

- Hosting voter registration drives.
- Organizing and participating in lobby efforts at the state capitol through the Student Senate of California Community Colleges.

- Serving on college and district-wide committees and taskforces (75% of the 9 identified campus/district-wide committees and taskforces have had at least one student representative). This assists in preparing students to become civically responsible global citizens.

Service Learning and Civic Engagement Projects

A combination of experiential and hands---on learning is utilized to furnish students with knowledge that will help them better understand their communities, their future careers, and the world around them.

Structured activities, including volunteerism, community service, and internships, provide a practical environment for experiential learning.

Examples of completed projects include:

- Volunteer efforts with Second Harvest Food Bank, Bill Wilson Center, Habitat for Humanity, and local schools in the East Side Union Unified School District.
- Incentivized Club Service-Learning Opportunity. Each campus club must complete one service-learning project a semester in order to receive funding and charter rights from ASG. Campus based clubs can accumulate. This unique approach empowers campus clubs to plan and implement service projects, increase their fiscal responsibility through managing a larger budget, and develop funding proposal and project management skills.
- Mandatory Volunteer service work for ASG Student Leaders, as part of their leadership positions.

Goal 2: Build a strong campus community

The Office of Student Life has worked to build a strong campus community. Building community on EVC has been done through a variety of such as:

- Have a variety and balance of multicultural, educational, recreational, social, academic, and program-based campus clubs and district organizations to support students, help them find belonging at EVC, and retain their educational status.
- Promote sustainable practices and ongoing program services and develop partnerships with food services on green practices (i.e. community farmers market).

Supporting College Diversity Initiatives and Cultural and Campus Climate Awareness

- The execution of a variety of diversity and multicultural events on campus to educated and celebrated their community.
- Providing safe spaces for groups to meet and have dialogue on campus.

Goal 3: Support of student organizations.

(Strategic Initiative 1)

Support for student organizations include the following:

District Club Initiatives:

Providing various opportunities to student organizations and clubs through collaborative initiatives across the district to further leadership development in areas of servant leadership, cultural competency, and fellowship.

Campus Wide Initiatives:

Created online training modules that assist student clubs and organizations with understanding the process, procedures, and mechanics of being a student club and organization. Information includes, but is not limited to:

- Getting started with clubs
- How to write a constitution
- Club funding
- Event planning 101
- Leadership opportunities

Develop College and Life Navigation Skills

- Provide student leaders with a developmental opportunity to gain educational experiences that promote student success and development by implementing workshops on how to do a career plan, with emphasis on the following: how to use social media, how to write a resume, and how to interview for a job.
- Mandated student leaders to meet with counselors once a year to establish an academic plan to ensure academic success.

- **3. Please state any recent accomplishments and / or challenges for your program and show how it contributes to the College's mission and success.**

The Office of Student Life is proud of the collaborative work that has occurred across the campus to focus on equity and diversity in serving students. One highlight and accomplishment is the Office of Student Life's focus on eliminating equity gaps and time to completion for Black Students. This focus was developed as a result of USC Race and Ethnic data that revealed that 75% of participating Black students lacked a sense of belonging at EVC. The Office of Student Life partnered with the Student Equity Committee and Associated Student Government to host focus groups with Black Students on campus to understand their experience and eliminate barriers to success. The focus group allowed for the training and leadership development of two Black students, as one co-led the focus group questions and another co-wrote the EVC Black Student Success Resolution.

As a result of the resolution and focus group, the Office of Student Life collaborated to create:

1. A new logo that can be utilized in advertising and promotional materials within the Black community
2. Multiple campus photoshoots to ensure that Black students appear in EVC marketing material and the EVC website
3. A outreach guide/enrollment brochure that is centered on the Black EVC Student Experience
4. The creation of diversity weeks that allows, among other groups, Black students to be in community with each other and campus employees
5. The creation of a mentorship and leadership program primarily for students of color

As a result of these dedicated efforts, EVC has seen a steady increase of Black Student Enrollment, retention, and degree completion.

A challenge that existed for the program in terms of campus engagement was negatively impacted by the pandemic, as students were often overwhelmed with other constraints that resulted in a decline in student activities and student organizations.

- **4. Please describe where you would like your program to be three years from now (program goals) and how these support the college mission, strategic initiatives and student success.**

Goal 1: Develop services and educational experiences that promote student success and development for LGBTQ students.

(Strategic Initiative 1)

The Office of Student Life serves as the hub for providing resources, education, and community for and about LGBTQ students on campus. OSL would like to see the following opportunities available to develop to support this underserved student population in order to increase student success rates.

- Ensure the sustainability of LGBTQ+ student support efforts
- Build-out critical service delivery infrastructures that address the unique needs of LGBTQ+ students Acknowledge the intersectional identities of students and actively leverage other funding sources (e.g., basic needs, mental health, and appropriate categorical programs) to support LGBTQ+ students holistically
- Develop an online training simulation through Kognito that will help build a community of respect, inclusion, and support for LGBTQ students.
- Work with Academic Affairs in the development of LGBTQ Courses and Certificates and/or Degrees
- Development of Pride Learning Community
- Development of a student Facing Campus Resource Guide for LGBTQ students

These program goals support the existing EMP for student success by assisting in:

- Successful Enrollment & Retention of Self-Identified LGBTQ+ Students in each academic year.
- Identified LGBTQ+ Students will report high levels of campus sense of belonging & support.
- LGBTQ+ Students will be represented, supported, and active in campus life including, but not limited to, student organizations & shared governance committees.

Goal 2: Expand Upon Diversity and Inclusion Opportunities and Celebrations

(Strategic Initiative 1 & 3)

The Office of Student Life serves as the hub for diversity events and campus opportunities for a sense of belonging and development for students and employees alike. In addition to institutionalizing Heritage Month celebrations and Diversity Weeks at the beginning of each academic semester that allows underserved populations to be in the community through Employee/Student Mixers, the program has the goal of increasing:

- Student Support Services:
    a. Expand support services that cater to the needs of diverse student populations, such as mentorship programs, leadership programs, and academic resources.
    b. Foster a sense of belonging through student organizations and initiatives that celebrate diversity.

- Accessible Resources:
    a. Invest in technology and tools that promote inclusivity, such as captioning for videos and materials compatible with assistive technologies.
- Cultural Competency Training:
    a. Implement mandatory cultural competency training for student leaders to promote understanding and respect for different cultures and backgrounds.

Goal 3: Expand Upon Support for Parenting Students

(Strategic Initiative 1)

As the basic needs program continues to expand at EVC and new legislation is introduced, the Office of Student Life has the following goals:

- The establishment of Parenting Hubs on Campus
- The expansion of support for parenting students includes emergency childcare vouchers, social support groups for parents, assistance with parenting rights, and access to baby food, diapers, and clothing to assist with the retention and success of parenting students.
- A Parenting Student Cohort or Learning Community Model

Dedicated Adjunct Counselor that can support parenting students.

5. Describe current program staffing by listing the current number of positions currently in the program. If the position is vacant, please indicate the vacancy.

Full time faculty 0

Part-time faculty 0

full time Classified 2

Part-time Classified (permanent) 0

Part-time Classified (hourly) 0

Administrators 1

Student workers 10

Program Quality

- **1. Describe the impact of the program's service offerings to the students and the campus.**

Due to the requirements of statewide mandates, a large amount of energy within the program has been invested into building out the basic needs program at EVC. Annually, since 2019, the Basic Needs Program publishes a report detailing the impact of the program's services offering to the students and the campus. This includes examining and comparing the demographic usage data, the equity impact of the program, the retention, completion, and success rates of students utilizing the program in comparison to the general student population.

The program has allowed for expanded partnerships that continue to increase service offerings to students and the campus. The EVC FRESH Market has successfully grown its community partnerships. One such partnership that has continued to expand is with New Seasons Market through three key areas. First, through the Hunger Partner Program. This program is centered on customer monetary donations collected at the register and in-store fundraisers. As a result of the collected monetary donations, the EVC Emergency Funds account has received quarterly payments

that assist in providing emergency funds to students facing a financial crisis. To date, we have received over $15,000 towards this fund as a result of the Hunger Partner Program. Secondly, in early 2021, The EVC FRESH Market Pantry, became one of three community recipients for the New Seasons Market's Neighbor Rewards Bag it Forward Program. Through the Neighbor Rewards Bag It Forward Program, each time a customer brings in a reusable bag, a 5-cent bag refund is provided to the EVC FRESH Market Pantry. These funds are used to further support the sustainability of the EVC Fresh Market Pantry. To date over $700 has been received. Lastly, as one of the nearest grocery stores to campus, New Seasons Market has established a daily student discount for students who show their EVC Student ID at checkout. Students receive a 10% discount at checkout for their items. EVC FRESH Market added three additional community partnerships in the 2021-2022 academic year including; DoorDash, Amigos de Guadalupe, and Dress for Success. All three of these partnerships allow for the expansion of existing services on campus. For example, the partnership with DoorDash allows for items from the Farmer's Market and Food Distribution to be delivered to students who either have class/work during the distributions, utilize public transportation and cannot carry items from the distribution, or are unable to carry items physically. We expect that this will increase access to services for parenting students, elder students, and/or students with physical disabilities.

As a results of such partnerships, the Basic Needs program is able to serve larger amounts of students. At a time when community colleges throughout the state of California have seen a decrease in enrollment, the impact of basic needs initiatives and services on student retention remains evident. In the Fall 2020 semester, 81% of students who received basic needs services were persisted into the Spring 2021 semester, compared to 71% of students who did not receive basic needs services. For the Spring 2021 semester, 76% of students who received basic needs services persisted into the Fall 2021 semester, compared to 62% of students who did not receive basic needs services. Data supports that the wrap-around services provided through the basic needs initiatives, not only contribute to the academic success of EVC students but help to ensure students remain at EVC. Through an equity lens, on average 75% Latinx students who received services through the basic needs program successfully passed their courses compared to 68% of Latinx students within the general student population. 77% of Latinx student who received services through the basic needs program persisted into the next major term, compared to 64% of the Latinx students within the general student population. For Black students, 75% of students who received services through the basic needs program successfully passed their courses compared to 68% of Black students within the general student population who did not utilize services. 73% of Black students who received services through the basic needs program persisted into the next major term, compared to 58% of Black students who did not utilize the program's services. Data such as this has shown that the program continues to have an impact on eliminating campus equity gaps.

- **2. Describe recent local, State and/or Federal changes that significantly impact the services to students.**

Recent changes to California legislation have impacted changes to Basic Needs support and services to students. Two major changes have been enacted within this comprehensive program review period including, AB2875 (Lactation Accommodations) and AB132 (Basic Needs Center).

AB2875, requires California Community Colleges to provide reasonable accommodations to a lactating student on their respective campuses to express breast milk, breast-feed an infant child, or address other needs related to breast-feeding, as specified. The bill also requires that a lactating student on a college or university campus be given a reasonable amount of time to accommodate the need to express breast milk or breast-feed an infant child, and that the accommodation be available whenever a student is required to be on campus. The bill prohibits students from incurring an

academic penalty as a result of their use of these reasonable accommodations. The bill authorizes a complaint of noncompliance with the requirements of the bill to be filed in accordance with specified procedures, and, if the complaint is found to have merit, requires the respective campus or appellate body to provide a remedy to the affected student. This bill required that these accommodations be implemented no later than January 1, 2020.

Section 4 of AB132, is a large basic needs mandate that has had a significant impact to available services to students. AB132 (4) requires each campus of the California Community Colleges, no later than July 1, 2022, to establish the position of Basic Needs Coordinator and designate a staff person as the Basic Needs Coordinator. The bill requires a basic needs coordinator to act as a broker in identifying, supporting, and linking students to on- and off-campus housing, food, mental health, and other basic needs services and resources, among other responsibilities. The bill also require each campus, no later than July 1, 2022, to establish a Basic Needs Center, which would be a central location on campus where basic needs services, resources, and staff would be made available to students, as specified. The bill requires each Basic Needs Center, among other duties, to help students to have the information needed to enroll in CalFresh and other relevant government benefit programs.

This bill further requires each campus, no later than February 1, 2022, to develop a document to be made available to students online that clearly lists all on- and off-campus basic needs services and resources, as specified. This document must be provided to students as a part of campus orientations in either electronic format or paper form, and to provide to faculty, and encourage the faculty to include in their syllabi, the online link to the electronic format of the document, the location of the Basic Needs Center once established, and the contact information for the coordinator once designated. Lastly, the bill also requires each campus, no later than February 1, 2022, to streamline the application and intake process for on-campus basic needs services and resources, to develop and implement a plan to identify and provide outreach to students who have basic needs insecurity, and to develop a student basic needs tab that is clearly visible and easily accessible from a drop-down menu on the home page of the internet website of the campus, as specified.

- **3. If applicable, describe a change in specific program compliance requirement with state, federal or accreditation agencies and how your program shifted their processes to ensure compliance.**

AB 132 (Postsecondary Education Trailer Bill) legislated a series of Basic Needs requirements that each California community college must implement within a certain timeframe. AB 132(4) requires, as of:

February 1, 2022, campuses must develop a document to be made available to students online that clearly lists all on- and off-campus basic needs services, and resources. EVC has created and distributed the FRESH resource guide to students and employees at the beginning of every semester since the Fall of 2017. However, changes were made to ensure the FRESH resource guide was provided to employees at the Spring Professional Development Day and was published on the EVC Basic Needs Resources Website Page as of January 14, 2022.

February 1, 2022, campuses must streamline the application and intake process for on-campus basic needs services and resources, and develop a student basic needs tab that is clearly visible and easily accessible from a drop-down menu on the home page of the internet website of the campus. EVC has been utilizing the Maxient System for Basic Needs Intake since the Fall of 2021. The system allows students to easily submit a form requesting assistance and allows the campus to track trends and access data needed for reports quickly. The EVC Basic Needs Resources Website Page went live on

January 14, 2022, in time for the Spring Semester. In addition to information for students, this page includes a Faculty/Staff Resource page with guidance for how employees can implement basic needs services into their classrooms and departments, including example of syllabus statements.

July 1, 2022, that campuses have a Basic Needs Coordinator and Basic Needs Centers. The EVC Basic Needs Coordinator was hired and began working within the FRESH Assistance Center (located in AR-120) in July of 2022. Some of the first projects the Basic Needs Coordinator created were a new Basic Needs Instagram and TikTok page, a new logo, and the hiring of additional Basic Needs Student Ambassadors.

- **4. Describe how the program measures success. For example, tracking and improvement in the number of educational plans completed for students.**

    a. Tracking and improvement in the number of educational plans completed for ASG students and club executive members.
    b. Tracking and improvement of self-reflected surveys of Associated Student Government Members
    c. Tracking and completion of attempted credit hours of Associated Student Government Members and club executive members
    d. Climate Survey responses from students
    e. Tracking course completion rates of students receiving Basic Needs services
    f. Tracking persistence/retention rates of students receiving Basic Needs services
    g. Tracking course success rates of students receiving Basic Needs services
    h. Tracking and completion of attempted credit hours, course completion, success rates, persistence/retention rates of students serviced through Student Code of Conduct and/or Title IX support.

- **5. Please review program information reported in MIS and shared with the community through the website, catalog, schedule of classes, brochures, etc. Is the program information accurate and consistent? What actions does your program take to ensure accuracy and consistency?**

    Program information relating to generic information about Title IX, student conduct, Basic Needs, and student life is provided within the catalog. As this information is generic, the information is accurate. The Director of Student Development approves each section before the catalog is published.

- **6. Describe how the program addresses the needs of the diverse student body, including students with disabilities and providing services by alternative delivery methods (for distance education students).**

All currently enrolled students at EVC are eligible for program offerings through the Office of Student Life. The Office of Student Life addresses the needs of the diverse student body through numerous opportunities offered in a variety of delivery methods including:

Personal Needs

- Associated Student Government Emergency Student Grant (a one-time grant up to $500 that supports students facing crisis)
- Clothing Pantry
- Hygiene and Toiletries
- Connection to campus and community resources for Title IX, homelessness, mental illness, career services, and financial literacy (appointments available via Zoom for distance education students)

Leadership Development Needs

- Opportunities to participate in the Associated Student Government
- Opportunities to participate on campus wide committees, taskforces, and screening committees
- Opportunities to participate in student organizations
- Opportunities to participate in leadership development trainings
- Opportunities to explore career fields through field trips and speaker series

Diversity Needs

- Hispanic Heritage Month Events
- Day of the Dead Event
- Hispanic Film Celebration Series
- Diwali
- Native American History Month Events
- Black History Month Events
- Black Film Celebration Series
- Asian Pacific Islander Heritage Month Events
- LGBTQ Awareness Month Events

Civic Responsibility Needs

- Title IX Training
- Bystander Intervention Training
- Domestic Violence and Healthy Relationship Training
- Volunteer Opportunities

- **7. Describe the communication within the program, with the students served and with other departments including Academic Affairs. What is working well and what can be improved?**

The Office of Student Life is open to the entire student body. Communication with students is widely conducted using the SlickText texting service, social media, and email. Students receive text messages and email blasts of upcoming important events and opportunities. The Office of Student

Life has three established social media accounts: Instagram, TikTok, and Facebook that allow students to directly with the program.

Communication with other departments, including Academic Affairs is largely conducted via email or the Maxient reporting system, dependent on the specific need or service within the Office of Student Life. Having generic emails such as studentlife@evc.edu, pride@evc.edu (mailto:pride@evc.edu), and fresh@evc.edu (mailto:fresh@evc.edu) allows for quicker emails between students and faculty alike, as multiple staff members within the program can provide a response instead of emails going directly to only the Director of Student Development.

Communication between Academic Affairs and Student Life can be improved upon in terms of understanding of what the Office of Student Life oversees, and what support services are offered. It is often assumed by faculty members that this office only oversees campus events and activities, rather than the other critical services such as Title IX, students' rights and grievances, and student misconduct. Particularly, as it relates to student conduct and classroom behavior, communication between these departments is essential to ensuring that faculty members and students alike are aware of procedures, rights, and remedies available to them.

Program Access

Student Demographic: Gender

- **Female: 4783 - 55.940%**

  Program Headcount
  2048.000

  Program Percentage of Total
  70.000

- **Male: 3741 - 43.640%**

  Program Headcount
  853.000

  Program Percentage of Total
  29.000

Student Demographic: Age

- **17 & Below: 547 - 6.390%**

  Program Headcount
  17.000

  Program Percentage of Total
  0.050

- **18-24: 5148 - 60.070%**

  Program Headcount
  1045.000

  Program Percentage of Total
  36.000

- **25-39: 1986 - 23.290%**

  Program Headcount
  1141.000

  Program Percentage of Total
  39.000

- **40 & Over: 874 - 10.220%**

  Program Headcount
  703.000

  Program Percentage of Total
  24.000

- **Unknown: 4 - 0.050%**

  Program Headcount
  0.000

  Program Percentage of Total
  0.000

Student Demographic: Race/Ethnicity (IPEDs Classification)

- **American Indian: 26 - 0.300%**

  Program Headcount
  17.000

  Program Percentage of Total
  0.050

- **Asian: 3587 - 41.910%**

  Program Headcount
  1425.000

  Program Percentage of Total
  49.000

- **Black or African American: 197 - 2.320%**

  Program Headcount
  87.000

  Program Percentage of Total
  0.030

- **Hawaiian/Pacific Islander: 30 - 0.350%**

  Program Headcount
  9.000

  Program Percentage of Total
  0.030

- **Latinx: 3494 - 40.870%**

  Program Headcount

1054.000

Program Percentage of Total
36.000

- **Two or More Races: 240 - 2.830%**

  Program Headcount
  85.000

  Program Percentage of Total
  0.300

- **Unknown: 435 - 5.000%**

  Program Headcount
  125.000

  Program Percentage of Total
  0.040

- **White: 548 - 6.410%**

  Program Headcount
  104.000

  Program Percentage of Total
  0.040

- **a. Based on the students served and percentage change year to year, is the program growing or declining? If so, what do you attribute these changes to and what changes will the program implement to address them?**

  The three main services provided by the Office of Student Life (with traceable data) are provided below:

  1. Basic Needs (2,657 members)
  2. Student Organizations (186 executive club members only)
  3. Associated Student Government (65 members)

     Total students served: 2,908

  Due to privacy rights of students who received services through LGBTQ support, Title IX, and/or Student Conduct, were not included within this demographic data. However, Maxient data from 2019-2022 reveal that the total number of students served for these three areas totaled 192 cases served.

  The program is growing in all areas served within the program including: basic needs services, Associated Student Government, student organizations (with the exception of the pandemic year of 2020-2021), student conduct cases, and student grievance cases. There has been a decrease in cases related to Title IX. There is a multitude of attributes to these changes including the pandemic which doubled the students accessing and receiving support through the basic needs program, the promotion and knowledge of the Maxient reporting system among students, and the return to in-person services (relating to the increase of student organization and campus event participation).

  As a result of these changes, the program has continued to find innovative ways to reach students to inform them of opportunities available within the department.

- **b. Are there any gaps in the students served compared to the college demographics?**

  As before, a gap in age for student participation within the Associated Student Government and Student Organization participation continues to exist for students aged 25 and older.

- **c. Based on your findings, what interventions can the program implement to address any gaps in services?**

  The Office of Student Life can assist is closing this gap through the encouragement of students, to establish student organizations that might cater more to this age group, offering more opportunities for engagement virtually, as well as actively recruiting students for the Associated Student Government through special programs that historically serve older student populations.

Curriculum- If applicable

Service Area Outcomes and Assessment

Related Assessments

PART C: Service Area Outcomes and Assessment

- **1. List the Service Area Outcomes (SAOs), and how they relate to the ILOs**

Core Activity or Service	Target Population	Student Learning Outcomes Acquired from core activity	Assessment Tool Pre/post test or survey; focus groups; student transfer rates…
EVC Food Distribution/Basic Needs	Latinx students	Latinx Students will readily have access to services addressing basic needs, such as food distribution and gift cards. Percentage of usage will increase by 5% from 2019-2020 usage.	Database Tracking/Usage Statistics

EVC Basic Needs	Faculty and Staff	Faculty and Staff will be given opportunities to actively participate in Basic Needs Activities and initiatives on campus in accordance with EVC's Strategic Initiatives (priority 2). Faculty and Staff participation will increase by 15% from 2019-2020 academic year.	Database Tracking
EVC Student Organizations	EVC Students	Office of Student Life will support and increase the number of cultural student organizations by 5% from 2019-2020 by Spring 2022 in accordance with EVC's Strategic Initiatives (priority 2).	Usage Statistics
EVC Associated Student Government	Associated Students Members	A.S. officers will demonstrate leadership through campus participation and actions (i.e., minimum of one student representative on every campus committee & organizing events) in accordance with ILO #1 Communication and ILO #4 Social Responsibility	Observation

- **2. Since your last program review, summarize SAO assessment activities and results. Please include dialogue regarding SAO assessment results with division/department/college colleagues and/or GE areas. Provide evidence of the dialogue (i.e. department meeting minutes or division meeting minutes…)**

Program SAO assessments have largely been centered on the following:

Core Activity or Service	**Target Population**	**Student Learning Outcomes** Acquired from core activity	**Assessment Tool** Pre/post test or survey; focus groups; student transfer rates…
Diversity Awareness Programs	Evergreen Student Population, Associated Students, Club Officers and Members	Students will demonstrate knowledge of various cultural backgrounds different than their own and properly examine the relationship of cultural experiences and educational attainment. ILO #4 Social Responsibility	Survey and focus groups

Student Governance	Associated Students and Club Officers	Student leaders will display leadership with an understanding of group dynamics including conflict resolution and group decision making processes.	Survey and Pre-Post Test
		ILO #1 Communication	
Personal/ Leadership Development Trainings	Associated Students and Club Officers/ Members	Students will recognize growth in leadership skills and a sense of individual expression and empowerment.	Pre-Post Test
		ILO #5 Personal Development	
Event Planning	Associated Students and Club Officers/ Members	Student leaders will successfully develop and manage annual organizational budgets and events.	Database Tracked
		ILO #2 Inquiry and Reasoning	

- **3. What plans for improvement or changes have been implemented to your program as a result of SAO assessment? Please share one or two success stories about the impacts of SAO assessment on student learning.**

Although a pre/post surveys were only assessed during three diversity events, in the 2019-2020 academic year, before the pandemic hit, the results highlighted the importance of having continuous speaker series on campus to promote understanding of various cultural backgrounds and to properly examine the relationship of cultural experiences and educational attainment. It would be beneficial to also examine the lasting effects of such gained knowledge.

The above plans for improvement can also be applied to assessment of personal leadership/development trainings. Every year, ASG Members completed a pre/post self-assessment to examine growth in leadership skills and a sense of individual expression and empowerment utilizing a Student Leadership Development Model from St. Cloud State University. ASG Members provided self-assessment on areas of: Self-Awareness, Leadership Foundations, Teamwork, Communication, Problem Solving and Conflict Management, Inclusion and Engagement with Diverse Communities and Connection to Community. The scale included: Competent, Polishing, Practicing, Exploring, and Yet to Discover. Consistently, for all areas, student leaders moved up one scale, during post-assessment. This aligns with EVC's mission empowerment of students from diverse backgrounds. As a result of the success of using this assessment within ASG, this assessment is also used for the executive leaders of student organizations, as well. The impact of assessment demonstrates the important role student life programs have in ensuring students are able to responsible members of the community, but more importantly, that our students are gaining a sense of self that will empower them to succeed beyond the classrooms and halls of EVC.

Faculty and Staff

Part D: Faculty and Staff

- **1. List current faculty and staff members in the program, areas of expertise, and describe how the positions contribute to the success of the program.**

  The Office of Student Life is comprised of one administrator: the Director of Student Development and Activities. The Director of Student Development & Activities supervises staff and ensures all functions of the office are operational.

  The Director of Student Development & Activities has expertise in the following:

  1. Title IX
  2. Student Conduct
  3. Diversity, Equity, and Inclusion Initiatives
  4. Student Leadership
  5. Event Programming
  6. Basic Needs
  7. Judicial Affairs and Legislative knowledge
  8. Mediation
  9. Budget and Fiscal Responsibility

  The Office of Student Life is comprised of two full-time classified employees: the Basic Needs Coordinator and the Office of Student Life Program Specialist.

  The Basic Needs Coordinator has expertise in the following:

  1. Basic Needs
  2. Community Partnerships

  The Student Life Program Specialist has expertise in the following:

  1. Event Programming
  2. Student Leadership
  3. Budget and Fiscal Responsibility

  The Office of Student Life is comprised of 10 student workers, paid through existing basic needs and CalFresh funding. The student workers contribute to the success of the program by serving as basic needs ambassadors between academic programs and the general student population. Ambassadors work at various campus events and within the food pantry and clothing closet on campus

- **2. List major professional development activities completed by faculty and staff over the last three years. In particular with regards to students success, equity, distance education, SAO assessment, guided pathways and/or innovative teaching/learning strategies. Please also discuss department orientation/mentoring of new and adjunct faculty.**

  The Office of Student Life currently has one full-time Administrator. This administrator is annually certified through the Association of Title IX Administrators to stay abreast of updates in regulations and processes surrounding Title IX.

In addition, the Office of Student Life Administrator served on the Executive Board of the California Community College Student Affairs Association in 2019-2020 and 2021-222 and actively participates within the state regarding updates in regulations and best practices within the student affairs field.

The Program Specialist completed Advisor Level I Certification through The California Community College Student Affairs Association (CCCSAA) and American Student Association of Community Colleges (ASACC) in 2022.

Budget Planning

Part E: Budget Planning

- **1. With your Dean, review the department Fund 10 budget and discuss the adequacy of the budget in meeting the program's needs.**

The only Fund 10 budget the Administrator within the Office of Student of Student Life oversees is the Diversity Funds and Student Activities Funds.

The Diversity Fund is grossly inadequate. EVC's mission states, "With equity, opportunity and social justice as our guiding principles, Evergreen Valley College's mission is to empower and prepare students from diverse backgrounds to succeed academically, and to be civically responsible global citizens", and yet only between $3,000- $5,000 is currently allocated to host over 12 heritage month/diversity events. Lack of funding limits the ability to have ongoing programming, guest speakers, and promotional materials that both highlights and promotes the importance of diversity within community.

The Student Activities budget is inadequate. The annual budget has been between $5,000-$8,000 which does not support growing the student life program, professional development, required certification trainings, or required membership and services fees to Maxient and ATIXA.

- **2. List all external funds i.e. fund 17 etc. the department/program receives, and describe their primary use.**

1. Basic Needs Allocation (one-time funding and funding for Basic Needs Coordinator salary)- $526,666
2. Student Equity Allocation- $25,000
3. LGBTQ Funding Allocation- $65,000

Technology and Equipment

Part F: Technology and Equipment

- **1. Review the current department technology and equipment needed and assess program adequacy. List any changes to technology of equipment needs since the last program review.**

Since the last program review, the Office of Student Life has invested in the SlickText text message service through funding from the Basic Needs Allocation from CCCCO. This service has allowed for a more streamlined and effective process in publicizing events and communicating information to

students.

In addition, television monitors were placed inside of the Gullo Student Lounge and Cafeteria area that allows for additional communication. Lastly, technology located inside of the ASG Board Room was upgraded to allow for ASG to host effective shared governance meetings.

Technology equipment needed includes systems such as OrgSync, which creates an online community for campus that helps departments, programs, and all member-based organizations streamline processes and drive engagement. The platform reflects the unique structure of an institution and helps connect and engage with the populations served, improves information sharing, minimizes paper usage, tracks co-curricular involvement, and allows the generation of reports on all data collected for annual reports and accreditation. An iPad or laptop would assist with presentations during ASG meetings, record keeping of event attendees during large campus diversity events, while also encouraging the program to remain ecofriendly. Lastly, printers both inside the Office of Student Life and the Student Lounge are outdated and dysfunctional. In addition a color printer and poster maker would assist the program in creating promotional flyers and materials in house, reducing the cost of having these printed externally.

Additionial Information

Part G: Additional Information

Future Needs and Resource Allocation Request

Total Cost

Attach Files

Attached File
1.17.24 Edits Student Services Comprehensive Program Review Template.pdf
(/Form/Module/_DownloadFile/5266/43800?fileId=439)

IEC Reviewers

IEC Mentor
Robert Brown

IEC Second Reader
Fahmida Fakhruddin