Plans for Mathematics >> **2025 - 2026 Mathematics CHC Instructional Program Review 2025-2026**

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Name :

2025 - 2026 Mathematics CHC Instructional Program Review 2025-2026

Principal Preparer :

Danielle Bell

Planning Participants :

Danielle Bell

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Instructions

Please respond to the following questions. Please consult the Integrated Planning and Program Review Handbook for detailed instructions, the timeline for due dates, and the schedule for the four-year plan schedule.

1. Mission

a. Tell us your unit's mission: Provide a mission statement for your unit that clearly and succinctly describes your unit's purpose, idealistic motivations, and change it hopes to inspire.

b. Alignment with the college Mission: Rubric Item (Mission Alignment): The Crafton Hills College mission is to change lives. We seek to inspire our students, support our colleagues, and embrace our community through a learning environment that is transformational. Crafton Hills College welcomes everyone and is committed to working with students from diverse backgrounds. The College has an exceptional learning environment built on a tradition of excellence, a talented faculty, a driven student body, a committed staff, with passionate leadership and community support. **In what ways does your program advance the mission of the college?**

a) The Department of Mathematics has a mission to advance the educational, career, and personal success of our diverse campus community through equitable and inclusive practices, by helping them achieve their mathematical potential, serving as a vital foundation for various academic and professional pathways, with increased graphical, data, notational, numerical, critical thinking, and problem-solving literacy through applications of methods and mathematical modeling. (Question 10/Supports all Goals and Objectives)

b) The Department of Mathematics at Crafton Hills College plays a critical role in advancing the College’s mission to “change lives” through a transformational learning experience. The department is committed to fostering an environment where all students, regardless of

background, prior preparation, or life circumstance, are empowered to realize their full mathematical potential.
The department also serves as a foundation for both academic and career pathways, to equip students with the necessary tools in graphical, data, notational, numerical, and symbolic literacy, as well as critical thinking and problem-solving through mathematical modeling. The department aims to inspire students through relevant, engaging, and rigorous instruction in both STEM and non-STEM fields.
By implementing equitable and inclusive practices in curriculum design, instructional delivery, and assessment, the Mathematics Department ensures that all students have meaningful access to high-quality mathematical learning. This commitment to equity extends beyond the classroom, as the department also supports colleagues through collaboration, innovation, and professional development, fostering a shared culture of growth and excellence.

2. Description of Program

a. Organizational Structure and Staffing
b. Describe any activities in addition to instruction that you provide.
c. Describe any alternative modes of instruction and schedules of delivery: e.g.: online, hybrid, early morning, evening services.
d. **Rubric Item**: Describe how your curriculum is up-to-date, addresses equity and inclusion, and is demonstrably Needs-Based. Base the description on surveys, labor market data, transfer patterns such as GE, IGETC, CSU, AA-T, or AS-T, accreditation standards, and/or articulation agreements. Consider the results of your most recent curriculum reviews in this section.
e. **Rubric Item**: Attach your scheduling matrix to show when courses in your area are offered. Click here for sample!
a) The Department of Mathematics, within the Social, Information, and Natural Sciences Division (SINS) under Jeff Smith as Division Dean, presently consists of:

- 1 open full time faculty position due to a retirement
- 6 full time faculty
- Roughly 25 part-time instructors

b) The Department of Mathematics provides or supports the following activities in addition to instruction:
The MΛTH (Mathematics For All Thoughtful Humans) Club: Math Club mainly focuses on studying various math concepts for the AMATYC (American Mathematics Association of Two-Year Colleges) exam, a test our students take during both the fall and spring semesters. The top two scorers on the exam from everyone that took it at CHC receive scholarships, so it's worth taking to sharpen your math skills!
Statistics Honors Course Offerings: In support of the College Honors Institute (CHI) this course provides highly motivated students who have demonstrated outstanding academic achievements the opportunity to participate in a program that challenges and deepens students' scholarship, creativity, and commitment. The math department has created Math 110H and intends to expand offerings.
Wayne Milloy Scholarship: The math department is also responsible for selecting the winner of the Wayne Milloy award for Outstanding Achievement in the Calculus Series.

Collaborate, Promote, Support the STEM Center and MESA Program:

- Workshops geared toward developing real-life mathematical applications and critical thinking skills. Past topics have included, but are not limited to, Research Experiences for Undergraduates (REUs), résumé building, financial literacy, FAFSA navigation, money management, communicating with employers, and transfer readiness.
- Community Building Activities such as pumpkin painting, planting succulents, game days, STEM Summit with RUSD, MESA Madness, STEM Open House, Women's History Month, classroom visits, STEM transfer and career fair
- Study Sessions to support students throughout the semester
- Chaperoning and attending student conferences and presentations such as SACNAS, SCCUR, Research Symposium

Tutoring/Supplemental Instruction: The Mathematics Department actively collaborates with the Tutoring Center to enhance academic support for students. Department members identify and recommend former students to serve as tutors, both in the Tutoring Center and embedded directly within math classrooms. These embedded tutors provide targeted, course-specific support that reinforces instruction, encourages engagement, and provides personalized, just-in-time academic support to build confidence, promote persistence, and succeed in their coursework.

Campus-Wide Events: The department supports the campus community by participating in campus-wide events throughout each semester. Some examples of these are:

- Welcome Tables
- Club Rush
- Pride Month
- Hispanic Heritage Month
- Black History Month
- Asian Pacific Islander Month
- One Book One College
- Women's History Month
- STEM/MESA End of Year Graduation Celebration
    - (see Goal 3)

c) To best serve our students, the Department of Mathematics provides an ample selection of course formats, including face-to-face, online, dual enrollment, CCAP, and co-requisite options. These are offered a variety of times: morning, mid-morning, afternoon, mid-afternoon, and evening. All available during the Fall, Spring, and Summer sessions. It is important to note per AB705 regulations that the department has only offered or created courses for transfer since Summer 2022. (see Objective 3.1)

d) The Department of Mathematics is committed to offering a needs-based curriculum that responds to student demand, institutional goals, and statewide mandates. All mathematics courses are kept up to date through a consistent six-year curriculum revision cycle, ensuring alignment with current academic standards and transfer requirements. The department offers corequisite support courses for students who need additional assistance, particularly in gateway transfer-level math courses, in compliance with AB705 and AB1705. To meet the diverse needs of the student population, the department offers all

remaining C-ID approved courses within the UC/CSU transferable systems, providing students with clearly articulated pathways to four-year institutions. The program offers the Associate in Science for Transfer (AS-T) degree. Due to a clear student preference for the AS-T, the department phased out the Associate of Arts degree in Spring of 2024.
All transferable math courses fulfill general education (GE) requirements, ensuring students can make efficient progress toward degree completion. The department's intentional development of corequisite support courses also demonstrates a commitment to equity by supporting historically underrepresented students in succeeding at the same pace as their peers. This targeted support model is a key component of the needs-based curriculum, designed to provide just-in-time academic support to ensure student retention, achievement, and transfer readiness.
The department is also in compliance with the Common Course Numbering (CCN) system as required by recent legislation. For example, MATH 110 has been updated to STATC1000, aligning with the statewide standard. The department is actively participating in the Tier 2 implementation phase to ensure continued alignment across the California Community College system.
e) Mathematics Department's 3-Year Scheduling Matrix

3. External Factors with Significant Impact

What external factors have a significant impact on your program? Please include the following as appropriate:
a. Budgetary constraints or opportunities
b. Competition from other institutions
c. Requirements of four-year institutions
d. Requirements imposed by regulations, policies, standards, and other mandates
e. Job market
  i) Requirements of prospective employers
  ii) Developments in the field (both current and future)

a) *Constraints*

Low Enrolled Courses/Sections: Low enrollment can restrict course offerings especially our newly developed courses MATH 250E, MATH 107.
Legislation and Pandemic: Since the implementation of AB705 and AB1705, which require direct placement into transfer-level math, along with the impacts of the pandemic, the number of math sections offered each semester has decreased. This shift has increased demand for academic support services and significantly reduced enrollment in traditional developmental courses.
Technology Access: Budget impacts the department's ability to provide updated instructional technology and software.
Staffing Challenges: Staffing Challenges for Dual Enrollment (CCAP) Sections: Staffing CCAP sections remains difficult due to the variability of high school bell schedules, limited availability of qualified faculty, and the logistical complexities of teaching at multiple off-campus high school sites during nontraditional college blocks. (see Objectives 3.1)

Opportunities

Transfer and Workforce Demands: Alignment with CSU/UC pathways and growing demand for data literacy are influencing course content and offerings, particularly in statistics and application-based math.
CVC Consortium Participation: The department has an opportunity to expand online course visibility and enrollment through the California Virtual Campus (CVC) Exchange. One faculty member currently has a POCR approved online STATC1000 course, making it eligible for Quality Reviewed status on the CVC Exchange. This not only enhances the department's online presence but also contributes to statewide efforts to increase access and transfer efficiency. (see Objective 2.1)
b) Crafton Hills College faces significant competition from local area community colleges such as College of the Desert, Chaffey, Mt. San Jacinto, Victor Valley College, the RCC campuses, San Bernardino Valley College, nearby four-year universities, and other colleges. Almost all of these campuses offer a far greater number of courses across a broader range of times and instructional modalities, including traditional, hybrid, online, self-paced, open entry/exit, late start, non-credit, and weekend formats. Additionally, many of these institutions have more resources and staffing flexibility to support more robust CCAP and Dual Enrollment programs, allowing them to serve a greater number of high schools with a wider variety of course offerings. As a smaller institution, Crafton Hills is at a distinct disadvantage in matching the scale, scheduling flexibility, and outreach capacity of these larger colleges. This presents students with more options for customizing their schedules or starting college early, potentially drawing them away from Crafton Hills and toward institutions that offer more convenience, accessibility, and accelerated pathways. (see Objective 3.1)
c) Students earning the Associate in Science for Transfer (AS-T) in Mathematics at Crafton Hills College complete a curriculum fully aligned with the California State University (CSU) and University of California (UC) system transfer requirements. The program ensures that students complete all necessary lower-division major preparation courses, including calculus, linear algebra, and other essential mathematics courses, alongside the required general education units following CSU GE Breadth or IGETC patterns. This alignment facilitates a smooth transfer process, allowing students to efficiently complete their bachelor's degrees within the standard four-year timeframe (two years at Crafton Hills and two years at the CSU/UC), thus supporting student success and timely degree completion.
d) The Department of Mathematics adheres to the following statewide regulations, policies, standards, and other mandates.

- Common Course Numbering (AB1111) - The department is required to align course numbers and titles with statewide standards, improving transferability and clarity. The transition includes renaming courses such as MATH 110 to STATC 1000 and progressing through Tier 2 implementation phases.
- California Assembly Bills - AB705 and AB1705
- C-ID and CCCCO Curriculum Standards
- CALCETC Mathematics 2.0 (New Degree Pattern Fall 2026)
- Accreditation Requirements for ACCJC and WASC
- SBCCDTA Collective Bargaining Agreements
- FERPA/ADA Regulations

e)
i) Our program is significantly influenced by changes in the job market and expectations of prespective employers. We've observed a growing trend in which more students, including re-entry and career-change students, are pursuing higher education to develop job-related skills.
Students who complete math courses at Crafton Hills College develop not only foundational mathematical knowledge but also transferable analytical, critical thinking, and problem-solving skills that are directly applicable to careers in STEM, business, education, healthcare, and public service. These skills improve students' employability and long-term career mobility. As a result, the connection between math proficiency and workforce readiness has contributed to a steady demand for mathematics courses at our institution.
Additionally, employers increasingly expect digital fluency, including familiarity with tools like Excel, statistical software (e.g., R or SPSS), and programming languages such as Python. The department recognizes the need to integrate more technology-based and application-focused learning opportunities to keep pace with employer expectations and labor market trends.
Increasingly, employers are also seeking candidates with exposure to technological tools and AI-related concepts, including skills in data analytics, machine learning, algorithmic thinking, and basic coding. The department is exploring how to better prepare students for these emerging demands by integrating technology-enhanced learning and real-world modeling into coursework.
ii) Rapid developments in the broader field of mathematics and its applications, especially in data science, and artificial intelligence (AI) are influencing our program. The increasing role of data-driven and AI-powered decision-making across industries has created a growing need for statistical fluency, computational thinking, and an understanding of how algorithms shape modern systems.

4. Progress on Outcomes Assessment (Four-Year Question)

Refer to the SLO Cloud and the SLO Cloud Dashboard to evaluate the results from your program level outcomes and to develop actions reflected in your program review action plan (i.e. Question 10). **Rubric Item**: Program Learning Outcomes

a. Please summarize **Program Level Outcomes (PLO) assessment results**. Include a discussion of whether or not disproportionate impact has been identified. Also, ensure that the PLOs are in the catalog, and discuss whether the program met its target for each PLO.
b. Please describe any program/course and/or instructional improvements you plan to make as a result of the PLO assessment(s), specifically focusing on removing any identified disproportionate impact.
c. What objective(s) or action step(s) will you add to Question 10 as a result of the PLO assessment(s) and to address any identified disproportionate impact? If none, please explain.
a) The Mathematics Department collected PLO data from the SLO Cloud; however, the department has identified technical issues affecting data accuracy. Specifically, the SLOs in the system are not properly mapped to their corresponding PLOs, which impacts both course-level and student-level reporting. In addition, prior to Fall 2023, the department

updated the naming conventions of its PLOs (e.g., adding descriptive tags such as "Notational Literacy" and "Application of Methods"), which caused duplicate entries in the database but did not change the actual PLO content.
The department currently assesses three PLOs:
PLO #1 – ***Notational Literacy***: Recognize, define, and apply formal mathematical notation to explain mathematical ideas.
Three-year average: 76.2%
PLO #2 – ***Application of Methods***: Successfully perform multivariate calculations, such as differentiation and integration, in both theoretical and applied settings.
Three-year average: 79.5%
PLO #3 – ***Critical Thinking***: Apply critical thinking skills to analyze, interpret, and solve a variety of mathematical problems.
Three-year average: 63%
The department's target benchmark is 70%, which was exceeded for PLO #1 and PLO #2 but not met for PLO #3. No disproportionate impact was formally identified due to incomplete SLO-to-PLO mapping in the system; however, based on course-level success rate data, the department continues to monitor potential equity gaps by ethnicity, age, and gender as part of ongoing PLO review.
b) PLO #3, which measures critical thinking, remains an area for improvement. To strengthen this outcome, the department plans to integrate more project-based learning, problem-solving, and reflection-based assessments across core math courses. Faculty are also exploring ways to collaborate as a learning community to research and implement effective strategies for developing critical thinking skills and addressing any equity gaps that may emerge once data accuracy is restored.
c) The department has developed goals and objectives that directly address PLO #3 and support continuous improvement of instructional practices. (Objectives 1.2, 1.4, and 2.3)

5. Unit's Performance on Institutional Quantitative Effectiveness Indicators

Please discuss your program's performance on each data item below.
a. Instructional Program Health Evaluation Rubric
i) **Rubric Item**: Use Office of Institutional Effectiveness, Research, and Planning (OIERP) data to set a Course Completion Rate target, provide an explanation for the target that has been set, develop strategies to reduce disproportionate impact if any exists by gender, age, or ethnicity, and include any strategies in the action plan (i.e. Q10). **Please visit the Completion & Success Dashboard to access your program specific data**.
ii) **Rubric Item**: Use OIERP data to set a Course Success Rate target and provide an explanation for the target that has been set, develop strategies to reduce disproportionate impact if any exists by gender, age, or ethnicity, and include any strategies in the action plan (i.e. Q10). **Please visit the Completion & Success Dashboard to access your program specific data**.
iii) **Rubric Item**: What is your FT/PT Faculty Ratio, how is it impacting your program, and student success? **Please visit the Full-Time/Part-Time Faculty Ratio Dashboard to access your program specific data**.
iv) **Rubric Item**: Use OIERP data to set a WSCH/FTEF Ratio target and provide an explanation for the target that has been set. Based on Faculty dialogue what is a feasible

WSCH/FTEF (productivity) target for your area? (Note: 525 may not be a realistic target for your area.) **Please visit the WSCH/FTEF Dashboard to access your program specific data**.

i) Course Completion Rate Target: 90%

- 2021-2022: 83%
- 2022-2023: 88.1%
- 2023-2024: 88.6%
- 2024-2025: 90.1%
- Four year completion rate average: 87.5%

The department has set a 90% course completion rate target, based on steady improvement from 83% in 2021–2022 to 90.1% in 2024–2025, with a four-year average of 87.5%. Early declines during the pandemic reflected disruptions to instruction and access, but expanded online modalities, enhanced support services, and faculty adaptation have contributed to recovery and growth. AB 705 and AB 1705 placement reforms increased direct enrollment into transfer-level math and calculus, bringing a wider range of preparedness into classrooms and prompting the expansion of co-requisite support, embedded tutoring, and targeted interventions.

The Mathematics program has identified ***potential*** disproportionate impact of course completion rates across multiple years for the following groups: Native American, Pacific Islander/Native Hawaiian, Black/African American, and Unknown/Unreported students.

- 2021–2022: Native American students showed a DI of -8.0. (Sample size was fewer than 10 students.)
- 2022–2023: Native American students showed a DI of -21.4. (Sample size was fewer than 10 students.)
- 2023–2024: Black/African American students showed a DI of -9.2. This was the only reporting period where the student population with DI met the threshold for statistical significance.
- 2024–2025: Pacific Islander/Native Hawaiian students showed a DI of -40.0 (fewer than 10 students), and Unknown/Unreported students showed a DI of -8.3 (fewer than 10 students).

The department will continue to closely monitor disaggregated data for disproportionate impact by gender, age, and ethnicity, and will address any equity gaps through targeted interventions, culturally responsive pedagogy, flexible course offerings, and proactive student support services. (see Objective 1.3)

ii) Course Success Rate Target: 65%

- 2021-2022: 56%
- 2022-2023: 61.2%
- 2023-2024: 63.2%
- 2024-2025: 69.6%
- Four year success rate average 62.5%

The department's current course success rate target is set at 65%. Based on a four-year average of 62.5% and steady improvement from 56% in 2021–2022 to 69.6% in 2024–2025, the department will now adjust the success rate target to 72%. This target balances recent gains with the need for sustainable, long-term improvement. Disaggregated data reveal disproportionate impact for Black/African American, Hispanic, and Pacific Islander/Native Hawaiian students. These gaps have been shaped by pandemic-related learning loss and the implementation of AB 705/1705, which requires direct placement into transfer-level math, increasing the need for targeted support. To address these challenges, the department will expand embedded tutoring and supplemental instruction, increase flexible course offerings, implement proactive early alert systems, and provide culturally responsive professional development for faculty. Additional strategies include strengthening counseling partnerships to ensure students are placed in the most appropriate math pathway and offering targeted outreach to disproportionately impacted groups to promote engagement and persistence.

The program has identified disproportionately impacted groups across multiple years, including Black/African American, Hispanic, and Pacific Islander/Native Hawaiian students.

- 2021–2022: Hispanic students experienced a -15% DI.
- 2022–2023: Black/African American students experienced a -6% DI, and Hispanic students experienced a -11% DI.
- 2023–2024: Black/African American students again showed a -18% DI, and Hispanic students showed a -10% DI.
- 2024–2025: Hispanic students experienced a -9% DI and Pacific Islander/Native Hawaiian students experienced a -72% DI, but this figure for Pacific Islander/Native Hawaiian is based on a sample size of fewer than 10 students.

The department will continue to closely monitor disaggregated data for disproportionate impact by gender, age, and ethnicity, and will address any equity gaps through targeted interventions, culturally responsive pedagogy, flexible course offerings, and proactive student support services.

In looking at the disproportionate impact in specific courses the department noticed that in 2023-2024 the disproportionate impact in MATH 102 for Hispanic students was -9% and Black/African American -31% but in 2024-2025 the disproportionate impact in MATH 102 was eliminated for both Hispanic and Black/African American. This may be due to the following:

- Renaming of the course from College Algebra to College Algebra for STEM
- A more student focused STEM Center/MESA Program
- USC Race and Equity Training for Faculty
- More OER sections for 102
- Continued communication with counselors about student placement … (see Objectives 1.3)

The department would like to note the RP Group's African American Transfer Tipping Point study, which found that African American students at Crafton Hills College who completed transfer-level math in their first year increased their odds of reaching "near the transfer gate" by 560%, compared to 160% statewide. This remarkable outcome highlights the effectiveness of Crafton's equity-minded practices and early support for students in transfer-level math under AB 705/1705.

iii) Four year FT/PT Ratio:

- 2021-2022: 37
- 2022-2023: 45.4
- 2023-2024: 46.8
- 2024-2025: 41.9

The ratio shows the percentage of classes taught by full-time faculty. Our ratio has grown from 37% to as high as 46.8% before dropping slightly to 41.9%. Changes in the ratio are affected by retirements, sabbaticals, leave of absences, enrollment shifts after AB 705/1705 and the pandemic. An increase in the percentage has allowed the program to provide more consistent instruction, better curriculum development, availability for office hours and student support, which positively impacts student success. However, the ratio still being below the 75% goal limits our ability to offer the same level of stability and mentorship across all courses, especially in high-demand areas like statistics and STEM transfer pathways. (see Objectives 2.3)

iv) Four year WSCH/FTEF Ratio:

- 2021-2022: 360
- 2022-2023: 390
- 2023-2024: 415
- 2024-2025: 461

Given the steady increase in WSCH/FTEF from 360 in 2021–2022 to 461 in 2024–2025, the department has demonstrated improved efficiency in course scheduling and faculty load management. Faculty dialogue indicates that a feasible target for our area would be between 480-500 WSCH/FTEF, which balances productivity with maintaining class sizes that allow for quality instruction, equitable student support, and the achievement of course learning outcomes. This would keep the department on an upward trend without overextending resources.

Over the past four years, the Math department's WSCH/FTEF has been above the campus average in two of those years (2022–2023 and 2024–2025) and slightly below in the other two. This reflects strong productivity overall, with only minor fluctuations while maintaining a focus on instructional quality.

6. Other Unit-Specific Quantitative and Qualitative Results

a. **Rubric Item**: How do your program student demographics relate to the college demographics? What are the discrepancies, and what plan do you have to address any discrepancies? Include any plan to address discrepancies in the action plan (Q10) – **please visit the Demographics Dashboard to view program and college demographics by year**.

b. Summarize the results of any quantitative or qualitative measures not provided in the previous question that you have chosen to gauge your program's effectiveness (e.g.:

transfers, degrees, certificates, satisfaction, enrollments, Perkin's data, equity data, student research experience, student clubs, etc.). **Please visit the Degrees & Certificates Dashboard to access your program specific data on degrees and certificates**.

c. What improvements/changes have you implemented or do you plan to implement as a result of your analysis of the measures illustrated in 6a and 6b? Include any plans in the action plan (Q10).

a) The Mathematics Department's demographics are closely aligned with the college overall, except our Black/African American student population is about 2% lower, while our percentage of students aged 19 or younger is higher. To address the underrepresentation of Black/African American students, we plan to strengthen outreach to local high schools and community organizations, advocate for the creation of an UMOJA or similar culturally responsive support program, and continue to ensure textbook materials reflect diverse representation and inclusive messaging. (see Objectives 1.4)

b) Degree completion data demonstrate that the Mathematics Department continues to make steady progress in student achievement and transfer preparation. The Degrees and Certificates dashboard shows from 2020–2025 the program awarded a total of 131 degrees with the majority being Associate in Science for Transfer (AS-T) degrees and AA degrees representing a small but consistent portion. This trend indicates that students are increasingly choosing the AS-T pathway, aligning with statewide transfer initiatives and reflecting successful advising and curriculum alignment with CSU and UC requirements. As of Fall 2024, the department's local AA degree was discontinued to streamline offerings and focus on supporting transfer-oriented pathways.

Disaggregated data show that Hispanic and White students represent the largest share of degree earners, while Black/African American and Asian students continue to be underrepresented. By age, most degree recipients are 20–24 years old, consistent with the college's traditional transfer student population. Gender data indicate a higher number of males earning a degree compared to females.

The department's data reflect strong engagement with the transfer degree, steady enrollment growth, and effective adaptation to AB 705/1705 mandates, resulting in improved student success and streamlined degree completion pathways. Collaboration with the STEM Center continues to enhance outcomes through targeted tutoring and academic support. The department has also strengthened assessment practices to ensure consistency and equity while aligning curriculum with Common Course Numbering and the new Mathematics 2.0 degree pattern. Moving forward, efforts will focus on expanding embedded tutoring, increasing outreach to disproportionately impacted groups, and further refining curriculum and support strategies to promote equity and transfer readiness.

c) Based on our demographic and effectiveness analyses, the department will continue to strengthen partnerships with the STEM Center, expand embedded tutoring and outreach efforts, and integrate culturally responsive teaching practices to improve student equity and success. (Objectives 1.2, 1.4, and 2.3)

7. Evaluation

Evaluation: You have already provided a description and analysis of the program in questions 1-6, please provide an analysis of what is going well/not well and why, in the following areas:

- Alternative modes and schedules of delivery (e.g.: online, hybrid, early morning, evening services, etc.)
- Partnerships (internal and external)
- Innovation and Implementation of best practices
- Efficiency in resource use
- Staffing
- Participation in shared governance (e.g., do unit members feel they participate effectively in planning and decision-making?)
- Professional development and training
- Compliance with applicable mandates

Alternative Modes and Schedules of Delivery

The program has made strong progress in offering multiple modes of instruction. Online courses have expanded, more courses now use Open Educational Resources (OER), and an increasing number are POCR-certified, ensuring higher-quality online instruction. Additionally, the program has grown its CCAP offerings at local high schools, providing more early access to college-level coursework. These efforts reflect responsiveness to diverse student needs. However, adapting to statewide changes under AB1705 has been challenging, particularly in clarifying course requirements and addressing UC non-acceptance of the new 250e course. (see Objectives 2.1, 3.1)

Partnerships

External and internal partnerships are strengthening. Faculty are more involved in outreach to local high schools through CCAP, mentoring summer research students, and chaperoning students at STEM conferences. These connections enhance transfer preparation, build community ties, and expand student opportunities. (see Objectives 3.1, 3.2)

Innovation and Best Practices

Faculty have engaged in professional growth and innovative teaching practices, including completion of the USC Race and Equity course, ACUE training, and adoption of project-based learning and alternative assessments. These practices reflect a commitment to equity, student engagement, and continuous improvement of pedagogy. (see Objectives 1.2, 1.3)

Efficiency in Resource Use

Use of OER has reduced costs for students while maintaining instructional quality. Funding from AB1705 has been invested strategically, such as adding more whiteboards to the dedicated mathematics classrooms to encourage student collaboration and group work. STEM Center workshops also maximize existing resources by centralizing student support services. (see Objectives 1.1, 1.2)

Staffing

Faculty engagement is a major strength. Beyond classroom teaching, instructors are involved in research mentorship, outreach, and professional development. Their active

participation in equity training, assessment redesign, and innovative pedagogy has enriched both faculty expertise and the student experience.

Participation in Shared Governance

Faculty are actively engaged in shared governance through service on the Academic Senate, negotiations, IEAOC, and the POCR team. This involvement demonstrates a strong commitment to planning, policy, and institutional improvement. However, external mandates like AB1705 continue to limit local flexibility in decision-making, creating tension between state requirements and faculty-driven planning.

Professional Development and Training

Faculty professional growth is robust. Participation in the USC Race and Equity course, ACUE training, and workshops in the STEM Center has elevated instructional practices. These efforts strengthen equity-minded pedagogy and innovative approaches to student engagement. (see Objectives 2.1, 2.2, 2.3)

Compliance with Applicable Mandates

While the program continues to comply with state mandates, AB1705 remains a challenge. The complexity of defining course needs under the legislation and the UC system's non-acceptance of the 250e course highlight the gap between compliance and practical student outcomes. Continued attention is needed to align compliance with meaningful academic pathways.

8. Vision

a. Tell us your unit's vision: Where would you like your program to be four years from now? Dream big while considering any upcoming changes (e.g.: new buildings, labs, growth, changes in the discipline etc.).

b. Alignment with the college Vision: **Rubric Item** (Vision Alignment): The Vision of Crafton Hills College is to empower the people who study here, the people who work here, and the people who live in our community through education, engagement, and innovation. **In what ways does your program advance and align with the vision of the college?**

a) We envision a dynamic and inclusive mathematics learning community where all students are empowered to achieve success, think critically, and apply mathematics to real-world challenges. Through collaboration, innovation, and equity-driven instruction, we aim to inspire lifelong learning and open pathways to academic and professional achievement.

Looking ahead, the Department of Mathematics will continue to thrive in the new instructional building that will house additional math classrooms, the tutoring center, and honors lounge. This will help bring support resources closer to the heart of our program. With expanded access to computer-equipped classrooms, we will strengthen technology integration, and create more opportunities for interactive, hands-on learning.

Our vision also includes continuing our partnership with the STEM Center and MESA program, expanded course offerings that utilize Open Educational Resources (OER) and Zero Textbook Cost (ZTC) options, and increasing Peer Online Course Review (POCR) certified courses to ensure high-quality online instruction. We will promote student success through inclusive pedagogy that values multiple ways of learning, including project-based learning, alternate assessments, and other equity-minded practices that create meaningful opportunities for all students to demonstrate their knowledge and skills.

By combining these innovations with a strong, supportive community, the Mathematics Department will continue to empower students, faculty, and the broader community through mathematics education. (see all Goals)
b) The Mathematics Department's vision strongly aligns with Crafton Hills College's commitment to empowering students, employees, and the community through education, engagement, and innovation. By fostering inclusive pedagogy, alternate assessments, and equity-minded practices, we ensure that all students have meaningful opportunities to learn and succeed.
The new instructional building with additional mathematics classrooms, the tutoring center, and honors lounge reflect the college's emphasis on creating innovative learning environments that strengthen engagement and support. Expanded computer-equipped classrooms will enhance access to technology, while increased use of OER, ZTC options, and POCR certified courses will reduce barriers to success and promote high-quality, accessible education.
Through deeper partnerships with STEM, MESA, and other campus programs, as well as the integration of real-world applications and project-based learning, the department advances the college's mission to prepare students for academic, professional, and community success. In these ways, the Mathematics Department directly contributes to Crafton Hills College's vision to educate, empower, and inspire through education, engagement, and innovation.

9. Progress on Prior Goals

Briefly summarize the progress your unit has made in meeting the goals and objectives identified in your last Four-Year Action Plan.

There are no goals, objecitves, or actions/activities for this plan.

10. Four-Year Action Plan (Goals, Objectives, Resources, and Actions)

NOTE: Beginning in Fall 2024, prior-year goals, objectives, and resource requests will not be copied over to the current-year plan. Writers are required to manually enter goals, objectives, and any applicable resource requests.

Rubric Item: Reflect on your responses to all the previous questions. Complete the Four-Year Action Plan, entering the specific program goals (goal rubric) and objectives (objective rubric) you have formulated to maintain or enhance your strengths, or to address identified weaknesses. **In writing your objectives and developing your resource requests, take into account student learning and program assessment results**. Assign an overall priority to each goal and each objective. In addition, enter any actions and/or resources required to achieve each objective. (Click here to see a definition of goals, objectives, actions, and how they work together.)

- **1 - Goal - 3. Increase Student Success and Equity**

Priority Rank:

1

Objectives:

  - **1.1 - Objective - Increase the number of courses that utilize OER or low cost materials.**

Priority Rank:

0

Start Date:
08/18/2025
End Date:
08/20/2029
Responsible Person:
Mathematics Department
Strategic Direction (Goal):
3. Increase Student Success and Equity
Impact Type:
Site
Institutional Learning Outcome:
Unknown
Actions/Activities:

- **1.1.a1 - Identify Courses for OER Adoption**

Identify at least 3 high enrollment courses that could transition to OER.
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department

- **1.2 - Objective - Implement project-based learning and alternative assessments in mathematics courses.**

Priority Rank:
2
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department
Strategic Direction (Goal):
3. Increase Student Success and Equity
Impact Type:
Department
Institutional Learning Outcome:
Unknown
Resource Requests:

- **1.2.r1 - Supplies for Project-Based Learning**

Description
Purchase classroom supplies (e.g., whiteboard markers, modeling kits, craft supplies, manipulatives) to support collaborative projects.
Rationale

Active learning strategies help close equity gaps and improve persistence in mathematics courses.

Resource Type:
Ongoing
Expenditure Category:
Instructional Supplies (4300)
First Year Cost/Savings:
$3,000.00/$0.00
Second Year Cost/Savings:
$3,000.00/$0.00
Third Year Cost/Savings:
$3,000.00/$0.00
Actions/Activities:

- **1.2.a1 - Curriculum Development Support**

Develop new project-based or applied-learning modules for STEM-related math courses.
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department

- **1.3 - Objective - Disaggregate and analyze student success data annually to identify and address equity gaps.**

Priority Rank:
3
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department
Strategic Direction (Goal):
3. Increase Student Success and Equity
Impact Type:
Site
Institutional Learning Outcome:
Unknown
Actions/Activities:

- **1.3.a1 - Data Support**

Partner with OIERP to track outcomes by race/ethnicity, gender, and possibly the first-generation status.
Start Date:
06/30/2025
End Date:

06/30/2029
Responsible Person:
Mathematics Department

- **1.4 - Objective - Explore the development of equity focused learning communities to support disproportionately impacted students.**

Priority Rank:
9
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department
Strategic Direction (Goal):
3. Increase Student Success and Equity
Impact Type:
Site
Institutional Learning Outcome:
Unknown
Actions/Activities:

- **1.4.a1 - Learning Community Support**

Explore learning community programs such as UMOJA and PUENTE by observing other campuses and start identifying needed resources for Crafton to begin such programs.
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department

- **2 - Goal - 2. Engage in Practices that Prioritize and Promote Inclusivity, Equity, Anti-Racism, and Human Sustainability**

Priority Rank:
2
Objectives:

- **2.1 - Objective - Increase the number of POCR-certified courses.**

Priority Rank:
4
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department
Strategic Direction (Goal):

2. Engage in Practices that Prioritize and Promote Inclusivity, Equity, Anti-Racism, and Human Sustainability

Impact Type:

Site

Institutional Learning Outcome:

Unknown

Actions/Activities:

- **2.1.a1 - POCR Collaboration**

Colloborate with the POCR committee to encourage full and partime math faculty to enroll in the POCR process.

Start Date:

06/30/2025

End Date:

06/30/2029

Responsible Person:

Mathematics Department

- **2.2 - Objective - Support faculty participation in continuing education opportunities.**

Priority Rank:

5

Start Date:

06/30/2025

End Date:

06/30/2029

Responsible Person:

Division

Strategic Direction (Goal):

2. Engage in Practices that Prioritize and Promote Inclusivity, Equity, Anti-Racism, and Human Sustainability

Impact Type:

Site

Institutional Learning Outcome:

Unknown

Resource Requests:

- **2.2.r1 - Conference Funding**

Description

Travel and registration support for AB1705, curriculum, equity-focused conferences.

Rationale

Keeps faculty informed and engaged in statewide efforts to improve equity.

Resource Type:

Ongoing

Expenditure Category:

Conference and Travel (5200)
First Year Cost/Savings:
$10,000.00/$0.00
Second Year Cost/Savings:
$10,000.00/$0.00
Third Year Cost/Savings:
$10,000.00/$0.00

- **2.3 - Objective - Provide structured mentoring opportunities for part-time faculty.**

Priority Rank:
6
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Dean and Dept Chair
Strategic Direction (Goal):
2. Engage in Practices that Prioritize and Promote Inclusivity, Equity, Anti-Racism, and Human Sustainability
Impact Type:
Site
Institutional Learning Outcome:
Unknown
Actions/Activities:

- **2.3.a1 - Mentoring Program**

Continue discussions on creating a mentoring program.
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Dean and Dept Chair

- **3 - Goal - 4. Develop a Campus Culture that Engages Students, Employees, and the Broader Community**

Priority Rank:
3
Objectives:

- **3.1 - Objective - Grow CCAP partnerships with local high schools.**

Priority Rank:
7
Start Date:
06/30/2025
End Date:

06/30/2029
Responsible Person:
Dean and Dept Chair
Strategic Direction (Goal):
4. Develop a Campus Culture that Engages Students, Employees, and the Broader Community
Impact Type:
Site
Institutional Learning Outcome:
Unknown
Actions/Activities:

- **3.1.a1 - CCAP Expansion**

Conduct outreach meetings with local high school stakeholders to review CCAP course offerings, identify student needs, and explore opportunities for expansion.
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Dean and Dept Chair

- **3.2 - Objective - Increase faculty participation in STEM/MESA outreach.**

Priority Rank:
8
Start Date:
06/30/2025
End Date:
06/30/2029
Responsible Person:
Mathematics Department
Strategic Direction (Goal):
4. Develop a Campus Culture that Engages Students, Employees, and the Broader Community
Impact Type:
Site
Institutional Learning Outcome:
Unknown
Actions/Activities:

- **3.2.a1 - Outreach and Activities**

Encourage faculty involvement in STEM/MESA high school visits, student research mentorship, and conference chaperoning.
Start Date:
06/30/2025
End Date:
06/30/2029

Responsible Person:
Mathematics Department

11. Comments

This space is provided for participants and managers to make additional comments. Comments are not required.

There are no comments for this plan.

12. Supporting Documents

This question is for attaching supplemental materials. Supporting documents are not required.

There are no supporting documents for this plan.