



Program Review

Purpose

“Program review is the process through which constituencies (not only faculty) on campus take stock of their successes and shortcomings and seek to identify ways in which they can meet their goals more effectively. It is important to note here that the task of identifying evidence-based successful practices, and sharing these practices college-wide, is far more important than the negative perspective of trying to ferret out ineffective practices” – Academic Senate for California Community Colleges

Data Driven Decision Making

*Continual improvement
Evaluation of program resource needs
Fiscal stewardship and transparency
Culture of evidence*

Reporting Cycle

Program Review will be conducted every two years beginning Fall semester 2021.

| Reporting Cycle Activities | Timeline |
|--|--|
| Program Review forms posted on the Program Review website : | August 22, 2023 |
| Data is available on the ORPIE website: | |
| <ul style="list-style-type: none"> Instructional Program Review Dashboard | Available now |
| <ul style="list-style-type: none"> Student Services Program Review Dashboard | Coming August 28, 2023 |
| <ul style="list-style-type: none"> State comparison data may be found on Data Mart or Cal-Pass Plus | Available now |
| Program Review Office Hours and Data Support offered in a hybrid format in the Language Arts (LA) Room 115 and by zoom. | See the Program Review website schedule information. |
| Program Review draft due via Dynamic Forms. | Friday, October 6, 2023 |
| Review and Feedback Steps to Finalize Program Review: | |
| <ul style="list-style-type: none"> Step 1a: Technical Review by IEC (for all) and Academic Senate (for any that include a faculty request). See the technical review rubrics. | Friday, October 6, 2023 |
| <ul style="list-style-type: none"> Step 1b: Content Review by Deans/Director. Feedback due to author. | Friday, October 6, 2023 |
| <ul style="list-style-type: none"> Step 2: Completed Revisions submitted by author for final approvals by Deans/Manager and Vice Presidents. Final draft will address technical and content review feedback. | Friday, November 3, 2023 |
| <ul style="list-style-type: none"> Step 3: Final Program Review Approvals by Deans/ Manager, Vice Presidents, and IEC. ORPIE will post final draft to the website. | Friday, December 1, 2023 |
| <ul style="list-style-type: none"> Step 4: Funding Requests proceed through governance structure. | |
| <ul style="list-style-type: none"> Depending on the request either the Vice President or the IEC will assign the Program Review to the appropriate committee(s), including Planning Council for prioritization. | Friday, December 1, 2023 |
| <ul style="list-style-type: none"> Committees forward recommendations to the Budget Committee | Friday, December 1, 2023 |

| | |
|--|------------------------------|
| • Faculty Hiring timeline: | |
| • Academic Senate Q&A | Tuesday, November 14, 2023 |
| • Senator Ratings due | Friday, November 17, 2023 |
| • Academic Senate – Special Meeting to Review Rankings | Tuesday, November 28, 2023 |
| • Prioritized requests for faculty positions will be provided by the Academic Senate to the Executive Team | Wednesday, November 29, 2023 |
| <ul style="list-style-type: none"> President makes final faculty decisions and reports to Senate at Special Meeting. Based on approved faculty positions, faculty submit search committee membership and supplemental questions to HR and the Academic Senate. | Tuesday, December 5, 2023 |
| • Hiring committee participants appointed by the Academic Senate. | Tuesday, December 12, 2023 |
| • The Budget Committee forwards all recommended non-faculty requests to the Executive Committee | Tuesday, December 12, 2023 |
| • President announces all funded recommendations campus-wide | Monday, April 1, 2024 |

AUTHOR INFORMATION

Employee ID (E# or C#): First Name Last Name
Wing Email Address Office Phone

Dean/Manager First Name Last Name Email
Vice President First Name Last Name Email

Program Review - Draft
*Program-Review 2023-Math Dept.docx

Program Review - Final
Submission
*Program-Review 2023-Math Dept.docx

This Program Review includes the following:

Pick all that apply.

Faculty Request

Facilities, Technology, Equipment Request

Classified Request

This Program Review includes the following:

Pick all that apply.

If the answer was "Yes" but one of the following is not picked it will affect the form's workflow and you will have to resubmit.

Faculty Request

Facilities, Technology, Equipment Request

Classified Request

Faculty Requests (up to 3)
One upload per request

Faculty Upload1

Faculty Upload2

Faculty Upload3

Faculty Requests (up to 3)
One upload per request

Faculty Upload1 Math-Program-Review-Request-for-Funding-2023-24-Faculty (1).docx

Faculty Upload2

Faculty Upload3

Facilities, Technology or Equipment Draft Requests (up to 5)

FTE Upload1

FTE Upload2

Facilities, Technology or Equipment Update Requests (up to 5)

FTE Upload1 PR Request-for-Funding-2023-24 - White Boards.docx

FTE Upload2

FTE Upload3
FTE Upload4
FTE Upload5

FTE Upload3
FTE Upload4
FTE Upload5

Classified Personnel Draft Requests (up to 3)
One upload per request

Classified Upload1
Classified Upload2
Classified Upload3

Classified Personnel Updated Requests (up to 3)
One upload per request

Classified Upload1
Classified Upload2
Classified Upload3

Supporting Materials (Optional)

Upload1
Upload2
Upload3

Supporting Materials (Optional)

Upload1
Upload2
Upload3

...3338353139

Shawn Taylor

Author - Draft Signature

10/06/2023

Date

...3631383430

Shawn Taylor

Author - Final Signature

12/06/2023

Date

Dean/Manager Draft Feedback

no concerns with your program review.

Check the FTES/FETF ratio (1.16 (3yrs), 1.09 (2yrs), 1.09 (1 yr).

very well done. thank you for all the time and effort put into this program review.

FileUpload2

IEC Feedback

Awards, #2 - May want to clarify that the dept will not offer any AA degrees in Fall 2023. Does that include AATs?

No attachments needed.

FileUpload4

Program Review Rubric Upload

Academic Senate Executive Board Feedback

FileUpload1

Program Review Rubric Upload

Dean/Manager Final Feedback

FileUpload2

...3330383438

Danny Johnson 12/06/2023
Dean/Manager Signature Date

Vice President Feedback

FileUpload3

...3539333437

Kay Nguyen 12/06/2023
Vice President Signature Date

Downloaded to the following Committee Teams folder on:

-- Choose --

...3431393430

Lauren Davis-Losenko 12/15/2023
IEC Signature Date

Dean/Manager -
Feedback Signature

Electronically signed by Danny Johnson on 10/17/2023 3:01:15 PM

Academic Senate:
Technical Review
Signature

Signature not required

Academic Senate
Signature

Signature not required

IEC: Technical Review
Signature

Electronically signed by Karen Putnam on 10/14/2023 8:18:27 PM



Program Review Request Instruction

Program Review Purpose

“Program review is the process through which constituencies (not only faculty) on campus take stock of their successes and shortcomings and seek to identify ways in which they can meet their goals more effectively. It is important to note here that the task of identifying evidence-based successful practices, and sharing these practices college-wide, is far more important than the negative perspective of trying to ferret out ineffective practices” –Academic Senate for California Community Colleges, 2009

SUBMITTER INFORMATION

| | |
|--------------------------------------|-----------------------|
| First Name: | Shawn |
| Last Name: | Taylor |
| Email: | staylor3@gwc.cccd.edu |
| ID: | E78202 |
| Phone Number: | (714) 955-1481 |
| Who is your Dean/Supervisor? | Danny Johnson |
| Are you the Department Chair? | Yes |

GENERAL PROGRAM QUESTIONS

| |
|---|
| Name of Program (Academic Programs should be listed per discipline): |
| Mathematics |

| |
|---|
| Please provide a brief description and any significant change in your program since the last Program Review cycle. |
| <ol style="list-style-type: none">1. Since the implementation of AB705, the math department no longer offers non-transferrable (below 100 level) courses, including the retirement of many outdated or non-compliant courses.2. Remote learning during the COVID-19 pandemic and the shift to AB705 compliance have revealed that many students lack the math skills to succeed in transfer-level courses.3. The department now offers two courses with built-in math support, Math G115S: College Algebra with Support and Math G160S: Introduction to Statistics with Support.4. Due to dual and concurrent enrollment programs, the department has experienced an increase in the number of high school students enrolling in and completing transfer-level math courses for in-person, online, and HyFlex class modalities.5. The department offers sections of HyFlex modalities, such as Math G180: Calculus 1.6. To accommodate the schedule needs of students, the department offers a variety of course length options (first and second 8-week courses and 12-week courses) as well as a myriad of instructional modalities such as in-person, online, hybrid, and HyFlex. |



Program Review Request Instruction

What are your program's strengths? (Answers could include but are not limited to KPI data.)

1. Math faculty are addressing the impact of AB705/1705 on courses through discussions about effective academic intervention methods such as the Starfish early alert system.
2. Implement supplemental instruction measures, such as embedded tutoring.
3. Equity, accessibility, and inclusiveness are top priorities in all departmental decision-making.
4. Over 50% of the department's sections utilize OER/ZTC materials, resulting in numerous "no cost" courses.
5. Regularly analyzes success and retention data for all courses and modalities.
6. Collaborate closely with the counseling department to establish early alert protocols, enforce GPA bands for placing students in appropriate courses, and pilot new cohort models that link the enrollment of students in Math G115S and COUN 105 concurrently.
7. Offer several term-length courses, such as first 8-week, 8-week late-start, and 12-week courses, covering all instructional modalities.

What are the challenges for your program? (If there are regulations or requirements for your program that require additional support, please note those here.)

1. The required AB705/1705 implementation timeline creates novel challenges that are difficult to address promptly.
2. Large student knowledge gaps significantly hinder the faculty's ability to meet the diverse learning needs of STEM and BSTEM students in Math G115 and above.
3. Learning loss during the pandemic is still evident in many math courses, particularly in STEM gateway courses like Math G180 Calculus 1, Math G185 Calculus II, and Math G280 Calculus III.
4. A struggle to produce the results/outcomes for 705/1705 exists since math instructors have no control over when students choose to enroll in transfer-level math courses and class sequences.
5. Success and retention rates of underrepresented students continue to decline.
6. Fine-tuning the collaborative processes with the counseling department to ensure proper placement of students into transfer courses suitable to their academic program.

Describe any trends and contributing factors related to enrollment, retention, and success for this past cycle.

1. Enrollment has declined by 10.8% from 2020-2021.
2. FTES has declined by 8.5% from 2020-2021.
 - 3a. Overall Retention rates have declined from 86% in 2020-2021 to 83% in 2022-2023.
 - 3b. From 2022 to 2023, the data shows a decrease in retention rates for Asians (91.5% to 88.1%), for African Americans (76.3% to 65.7%), for Hispanics (79.0% to 77.2%), and for Whites (84.4% to 81.7%).
 - 4a. Overall Success rates have declined from 69% in 2020-2021 to 67% in 2022-2023.
 - 4b. From 2022 to 2023, the data shows an increase in success rates for African Americans (34.0% to 46.3%) and for Hispanics (53.6% to 54.6%) and for Native Hawaiian/Pacific Islander (30.0% to 46.7%); however, a decrease for Asians (81.2% to 77.9%) and for White (67.4% to 66.5%).
 - 4c. Although the success rates for African Americans, Hispanics, and Native Hawaiian/Pacific Islanders



Program Review Request Instruction

have increased from 2022 to 2023, they are still considered to be disproportionately impacted populations with many students (-20.6%, -12.3%, and -20.3% respectively).

5. There has been an increase in online course offerings, yet not all students who enroll in an online class are prepared for an online modality.

6. Online courses, especially summer online courses, have been popular among High School students.

How does your department/program support the goals of diversity, equity, inclusion, and accessibility? (Answers could include but not limited to gaps in success data, modality of course offerings, part/length of term (full-term, non full-term, etc.)

1. Offer a wide range of math courses that cater to various levels and learning styles.
2. Expanded the number of courses that use OER/ZTC materials.
3. Offer HyFlex courses, which expand GWC's accessibility footprint.
4. Offer diverse course modalities, including late start (8- and 12-week) courses.
5. Math faculty attend the CIL's Data Coaching series, improving data analysis and research literacy skills.
6. Math faculty attend the CIL's Triple (iii): Inclusive Instructional Innovations series.
7. All course materials, including textbooks and online resources, are accessible to students with disabilities.
8. Regularly collect and analyze data on student outcomes, looking for disparities among different demographic groups.
9. Implement evidence-based strategies to address disparities in achievement.

How does your department/program collaborate with other areas on campus to advance student success?

1. Work in partnership with the Counseling department to provide students with comprehensive information about math courses, aiding them in making informed decisions aligned with their program requirements.
2. Collaborate with the Academic Success Center (ASC) to offer students access to proficient embedded tutors, drop-in tutors, and various forms of academic assistance.
3. Partner with DSPS to provide reasonable accommodations for students with disabilities.
4. Invite ASC specialists to speak in math classrooms about GWC's academic support services.
5. Invite EOPS specialists to speak in math classrooms about services that assist students with financial and academic barriers.
6. Collaborate with the English department on implementing AB705/1705 mandates.
7. Collaborate with ORPIE to examine department and institution-wide data pertaining to AB1705 compliance and regulations.
8. Partner with CCI (Curriculum Committee and Instruction) to institute revisions to existing math courses and create new courses that align more effectively with the academic needs of students in their respective programs.

How does your department/program utilize technology to support student success?



Program Review Request Instruction

1. Faculty continue to explore and use various supplemental courseware such as Canvas, ALEKS, MyathLab, and MyOpenMath.
2. For online courses, students receive accessible course material, including lecture videos and notes, and use discussion boards to interact with professors and classmates.
3. The use of Zoom videoconferencing applications aids faculty and students by allowing remote study sessions and flexible office hours.
4. Faculty utilize online websites like YouTube and Desmos to enhance lectures and engage various learning styles.
5. Faculty use tablets instead of traditional whiteboards to record lecture content for later recall by students.
6. Use AI platforms like Wolfram Alpha, ChatGPT, and Symbolab for supplemental instruction and investigative learning.

Do any of the courses in your program have a CTE TOP code?

No

AWARDS

What type of awards does your program offer?

- Certificates
- Associate Degree
- Associate Dress for Transfer

Please provide the information for the number of awards for Associate Degrees (CCI-approved), Associate Degrees for Transfer (State-approved), and Certificates of Achievement for this program. Please put N/A if an area is not applicable for your program.

| | 3 years ago | 2 years ago | 1 year ago |
|---------------------------------------|-----------------|-----------------|-----------------|
| Certificates | NA | NA | NA |
| Associate Degrees | 43 in 2020-2021 | 32 in 2021-2022 | 26 in 2022-2023 |
| Associate Degrees for Transfer | 30 in 2020-2021 | 25 in 2021-2022 | 21 in 2022-2023 |

Please comment on the trends for the number of awards. You may then comment on any other relevant information provided by the Office of Research and Planning, and Institutional Effectiveness (ORPIE).

1. A declining trend in Associate Degrees AAs and ADTs is partly due to the COVID-19 pandemic.
2. The department will not award any Associate Degrees as of Fall 2023.



Program Review Request Instruction

FTES and FTEF

For the below questions, please provide your FTES (full-time-equivalent students, resident) divided by your FTEF (full-time-equivalent faculty). Please submit your rates from three years ago, two years ago, and this past year.

Please note: For programs with earned credit please use FTES (Res)/FTEF. For noncredit, please use FTES (Total)/FTEF.

| | 3 years ago | 2 years ago | 1 year ago (this past year) |
|-------------------------|-----------------|-----------------|-----------------------------|
| FTES/FTEF Ratio: | 37 in 2020-2021 | 34 in 2021-2022 | 35 in 2022-2023 |

Outside of hiring new faculty or staff, please discuss the data trends above, and your plans for serving more students.

1. Continue to offer diverse instructional modalities such as on-campus, online, hybrid, and hyflex.
2. Continue to offer 8-week and 12-week sections in all fall, spring, and summer terms.
3. Continue efficiently scheduling sections, course times, and class sizes.
4. Increase dual and concurrent enrollment of high school students in transfer math courses.
5. Create noncredit certificate pathways that support courses for STEM and BSTEM pathways.

CURRICULUM

After a thorough review of your courses in CurricUnet, with the assistance of your CCI representative, answer the following questions.

If you do not currently have a representative on CCI, you may contact either:

Gary Kirby: gkirbyjr@gwc.cccd.edu

Monica Jovanovich: mjovanovich@gwc.cccd.edu

Do you have any courses that have not been updated to CCI, within the required timeframe (6 or more years for a transfer-level course, 3 years or more for a CTE course)?

- Yes
 No

Are there courses in your Program (Degree/Certificate) that have not been successfully offered since the last Program Review? Please note, classes that were cancelled, they were not successfully offered)

- Yes
 No

Do you have active courses that are not part of a degree or certificate?

- Yes
 No



Program Review Request Instruction

Please indicate the name of the course(s) and the name(s) of the certificate(s) or degree(s) you intend to connect it to when you submit your revision to CCI.

Math G092: Support for Trigonometry is a basic skills corequisite credit course. Since it is a basic skills credit course, it must be standalone. This course was offered when it became effective in Fall 2019, but it has not been offered since due to low enrollment.

STUDENT LEARNING OUTCOMES

Do any of your SLOs use the exact wording as the course objectives?

(SLOs should be written to reflect the course objectives while not using the exact same language as the course objectives).

- Yes
 No

How has your department/program utilized SLO (Student Learning Outcome) results to make changes or improvements to your Program?

- 1. Assessment of SLOs:** Regularly assess and evaluate the SLOs. This involves collecting data on student performance through exams, assignments, or other assessments to determine whether students are meeting the desired outcomes.
- 2. Analysis of Data:** Once the data is collected, it is analyzed to identify areas where students excel and may fall short in achieving the SLOs.
- 3. Identify Weaknesses and Strengths:** Through the analysis, the math department identifies weaknesses and strengths of the courses and determines which SLOs are met effectively and which ones need enhancement.
- 4. Curriculum Revisions:** The department may decide to revise its curriculum based on the data and analysis.

GOALS AND REQUESTS FOR FUNDING

Requests – If you are requesting any of the following, they MUST be addressed within your Department goals. These forms must be submitted separately from the Program Review.

- Faculty
- Facilities, Equipment, Technology & Other
- Classified Personnel

GWC Strategic Plan Goals Legend

- 1. Enrollment:** GWC will increase credit and noncredit enrollment while providing efficient



Program Review Request Instruction

academic programs and student services.

2. **Equity and Success:** GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.
3. **Completion:** GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.
4. **Workforce Preparation:** GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.
5. **Facilities:** GWC will provide flexible, accessible, and sustainable learning environments that support the success of students, faculty, staff, and communities.
6. **Professional Development:** GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of the College Goals.
7. **Communication:** GWC will effectively communicate and collaborate within the College and its communities.

GOALS FROM PREVIOUS PROGRAM REVIEW CYCLE

Please refer to your previous Program Review cycle and summarize all outcomes for each goal.

Summary and Outcomes of Previous Goals (from the last Program Review) including resource requests and if they were funded or not.

The last program review occurred in Fall 2021, and the goals were as follows:

Goal 1: The GWC Math department will innovatively redesign the math student experience in all levels of math and engineering classes based on the takeaways of 2020-21.

Goal 2: The GWC Math department will collaboratively solve the GWC STEM pathway challenges related to math courses including: enrollment, persistence, and success for disproportionately impacted students.

Goal 3: The GWC Math department will strategically enhance the ecosystem of support focused on students' success across all levels of math courses. This ecosystem includes: academic success center, embedded tutoring, early alert program, stem center, etc.

Over the last two years, the math department has implemented the following to work towards achieving those goals

- Ended offering non-transferrable (below 100 level) courses, including the retirement of many outdated or non-compliant courses.
- Wrote curriculum for 115S and 160S courses
- Started offering two courses with built-in math support, Math G115S: College Algebra with Support and Math G160S: Introduction to Statistics with Support.
- Increased dual enrollment math course offerings to schools in two high school districts.



Program Review Request Instruction

- Implementation of Hyflex courses in calculus 1 and introduction to statistics
- We are also offering Math 115S that is linked to Counseling 105. The purpose of this coreq is to target students in BSTEM majors
- We have six math faculty that have served or currently serve at GWC data coaches.
- Regular math department faculty attending Inclusive Instructional Innovations professional development
- Increased the use of embedded tutors in math courses.
- Created course maps for each math course to complement CORs and increase implementation alignment.
- Increased the OER/ZTC offerings across all math courses at GWC.
- Worked collaboratively with counseling and English departments to prepare for Starfish pilot in Fall 2023.

The only funding request we submitted was for another full time faculty member, which was supported by data, but not funded due to the financial condition of our state and enrollment as a result of COVID-19.

GOALS FOR CURRENT PROGRAM REVIEW CYCLE

Current goals should be connected to GWC's Strategic Plan Goals.

GOAL 1 (Required)

Description of goal:

Obtain and analyze data for AB1705 compliance and implement targeting intervention systems and support services to aid students in completing math requirements for their program.

What actions will be taken to accomplish the goal?

1. Implement supplemental instruction and just-in-time intervention workshops through the National Laboratory for Education Transformation (NLET) and the California Corequisite Initiative.
2. Review course curriculum to align with current constraints and expectations of AB1705.
3. Engage in statewide professional development for faculty focused on best instructional practices in AB1075 accessible math courses.
4. Partner with the GWC Office of Research and Institutional Effectiveness (ORPIE) to analyze student performance data and develop institutional strategies to mitigate troublesome trends while recognizing achievements.

What metric will you use to measure your goal?

1. Analyze the success and retention data for all courses to determine the effectiveness of S-courses, workshops, embedded tutoring, and other intervention initiatives.



Program Review Request Instruction

Which of the College's missions and goals does this goal support? (check all that apply)

- Enrollment
- Equity and Success
- Completion
- Workforce Preparation
- Facilities
- Professional Development
- Communication

GOAL 2 (Required)

Description of goal:

Expand the math department's footprint in Guided Pathway and dual enrollment, concurrent enrollment, and noncredit course offerings.

What actions will be taken to accomplish the goal?

1. Promote our program through Science Showtime, Goldchella event, GWC Math Dept Website, social media campaigns, and collaboration with the GWC STEM Grant.
2. Collaborate with counseling, Raices, Puente, Umoja, and the MESA programs to advocate for math.
3. Professional development of faculty in best practices aligned to AB1705 with a DEIA focus.
4. Continue to foster our relationships with local high school districts to expand dual enrollment offerings and awareness.

What metric will you use to measure your goal?

1. Track success, completion, and transfer rates of students in Guided Pathways, Raices, Puente, Umoja, MESA, and dual enrollment courses.

Which of the College's missions and goals does this goal support? (check all that apply)

- Enrollment
- Equity and Success
- Completion
- Workforce Preparation
- Facilities
- Professional Development
- Communication

GOAL 3 (Required)

Description of goal:

Fully integrate the Starfish early alert system in all mathematics CRNs targeting at-risk math students.



Program Review Request Instruction

What actions will be taken to accomplish the goal?

1. Work with the counseling department to implement Starfish for all faculty.
2. Collaborate with ORPIE to identify the specific needs of at-risk math students by analyzing historical data, such as performance trends, attendance records, and dropout rates.
3. Attend training sessions and workshops for math faculty on how to use the Starfish system effectively.
4. Engage in regular communication between faculty and support services to assess the impact of interventions.
5. Establish a feedback loop involving faculty, advisors, and administrators to refine the integration of Starfish and the support system for at-risk students.

What metric will you use to measure your goal?

1. Use Starfish data and course-level success data to determine program effectiveness and improvement plans.

Which of the College's missions and goals does this goal support? (check all that apply)

- Enrollment
- Equity and Success
- Completion
- Workforce Preparation
- Facilities
- Professional Development
- Communication

OTHER INFORMATION

What additional information would you like to share about your program?

1. The department continuously pay attention to shifting student demographics, their needs, and levels of preparedness
2. Full and part-time faculty participate in professional development offerings.
3. The department is focused on designing student-centered appropriate use of Ai in math courses.
4. The department's courses successful articulate to all transfer level courses that qualify for C-ID, CSUGE, UCTCA, and IGETC, respectively.

Submitter's Signature: *Continuously*

Date: 10/6/2023

Supervisor's Review

As the supervisor of this program, I have reviewed this request.

- No concerns



Program Review Request Instruction

I have concerns

Comments: Click or tap here to enter text.

Supervisor's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.

Vice President's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.



Program Review Request- Faculty

Golden West College

FACULTY REQUEST

| | |
|--------------------------------------|----------------------------------|
| Submitter's First Name: | Shawn |
| Submitter's Last Name: | Taylor |
| Submitter's Email: | staylor3@gwc.cccd.edu |
| Submitter's Phone Number: | (714) 955-1481 |
| Who is your Dean/Supervisor? | Danny Johnson |
| Are you the Department Chair? | Yes |
| Who is your Vice President? | Dr. Kay Nguyen |
| Program/Department: | Click or tap here to enter text. |

Type of Review:

Note: Library and Counseling should submit individual Program Reviews: one for Instruction and one for Student Services.

- Instruction
- Student Services
- Administrative

Faculty Hiring Criteria:

The primary sources of information for ranking/rating program/department needs are:

- Faculty request form
- Program Review reports
- Program Vitality Reports (PVR) if applicable
- Data demonstrating need for request

All data is in the Golden West College Instructional Program Review 2023 [dashboard](#) provided by the office of research, planning and institutional effectiveness (ORPIE). If this is a non-instructional request, additional data may be found in the Student Services Program Review dashboard.

Note: All analysis of data is trend over the past 4 to 6 years (3 program review cycles = 1 strategic plan cycle)

| |
|---|
| Position title and area of specialization (if applicable). |
| Math (Statistics) |

| |
|--|
| Please provide and describe the data demonstrating the need for the request. |
| 1. Full-time FTEF rates increased from 15.3 to 16.6 yet the department has had 10 full-time (headcount) faculty since 2017-2018. |
| 2. The total FTEF (FT and PT) for 2022-2023 is 22.9 and the department has 16 part-time faculty. |
| 3. Impact of AB-705 and AB-1705 has made it more difficult for the FT faculty to initiate and implement effective intervention strategies while maintaining our contractual obligations. |



Program Review Request- Faculty

Golden West College

4. AB 1705 requiring support courses for Math 115, Math 160, Math 140, and Math 180 increases the need for hiring.

5. Dual enrollment in mathematics at GWC has steadily increased since 2020, and we anticipate another sizeable increase for GWC. This is due to AB 288 legislation, the California Community College Chancellor, Sonia Christians's vision of dual enrollment for all high school students, and CDE grants specifically for K-12 districts and charter schools to build dual enrollment programs and middle/early college high schools.

6. Dual enrollment enrollment and success in math at GWC. It is important to note that every success rate listed below is higher than the success rate for every single math course at GWC (not including dual enrollment students).

- Summer 2021, enrollment 116, success 97%

- Summer 2022, enrollment 180, success 92%

- Summer 2023, enrollment 223, success 88%

- Fall 2020, enrollment 20, success 80%

- Fall 2021, enrollment 58, success 86%

- Fall 2022, enrollment 56, success 84%

- Spring 2021, enrollment 118, success 81%

- Spring 2022, enrollment 151, success 85%

- Spring 2023, enrollment 138, success 88%

7. GWC math dual enrollment is particularly concentrated in Math 160 and Math 170, with the below enrollment numbers. These enrollment numbers greatly support the need in hiring another full time math faculty, particularly as this work is projected to expand in current and future years.

Math 160

-Spring 2021 - 110 students, Summer 2021 - 35 students, Fall 2021 - 28 students, Spring 2022 - 122 students, Summer 2022 - 52 students, Fall 2022 - 13 students, Spring 2023 - 102 students, and Summer 2023 - 110 students

-Math 170

Summer 2021 - 51 students, Fall 2021 - 5 students, Spring 2022 - 3 students, Summer 2022 - 100 students, Fall 2022 - 8 students, Spring 2023 - 9 students, and Summer 2023 - 89 students

8. Both item 6 above and item 7 above show that we have robust dual enrollment numbers as well as success numbers, supporting the hiring of another full time math faculty.

Please post job description (copy and paste description).

THE POSITION

Golden West College is currently seeking a full-time tenure track Mathematics Instructor(s) commencing with the 2024 fall semester. The primary teaching assignment involves teaching transfer level mathematics and statistics



Program Review Request- Faculty

Golden West College

courses. This assignment also includes curriculum and program development, participation in department, division, college committees, and participatory governance activities assuming leadership roles both within the department and in the institution as a whole; collaboration across disciplines and the leveraging of student support resources; and participation in ongoing professional development.

The assignment may be day, evening, weekend, online or off campus and is subject to change as needed. The ideal candidate for this position embraces the overall mission of the Coast Community College District, with a clear, focused commitment to supporting teaching and academic excellence, and student learning and success through the work of mathematics.

Conditions of Employment

Examples of Duties: Duties may include, but are not limited to, the following:

1. Provide instruction in statistics and mathematics in accordance with established course outlines.
2. Provide leadership in the development and revision of statistics and mathematics curriculum.
3. Participate in curriculum development, implementation, and evaluation; participate in and develop programs to measure student performance.
4. Maintain current knowledge in the subject matter area.
5. Maintain appropriate standards of professional conduct and ethics.
6. Fulfill the professional responsibilities of a full-time faculty member including, but not limited to the following: teach all scheduled classes unless excused under provisions of Board Policy; follow the department course outlines; keep accurate records of student enrollment, attendance, and progress; submit student grades according to established deadlines; post and maintain scheduled office hours; participate in departmental meetings and college and/or district-wide activities and committees as assigned.
7. Assignment may include day, evening, weekend, and online sections.

QUALIFICATIONS

Minimum:

1. Must meet one of the following qualifications under (a) through (d):
 - Possess the California Community College Teaching Credential for this subject area.
 - Possess a Master's degree from an accredited institution in mathematics or applied mathematics.
 - Possess a Bachelor's degree from an accredited institution in either of the above AND a Master's degree in statistics, physics, or mathematics education.

OR, possess a combination of education and experience that is at least the equivalent to the above. Candidates making an application on the basis of equivalency must submit an Application for Equivalency (located at www.cccd.edu/employment) in addition to all other required materials.
2. Demonstrated cultural competency, sensitivity to and understanding of the diverse academic, socioeconomic, cultural, disability, gender identity, sexual orientation and ethnic backgrounds of community college students.
3. Ability to contribute to campus and district-wide professional responsibilities and activities.
4. Ability to complement existing staff, student and community demographics in terms of professional and personal skills.



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Desirable Qualification:

- Evidence of an ability to contribute to campus and district-wide professional responsibilities and activities.
- Evidence of an ability to complement existing staff, student and community demographics in terms of professional and personal skills.
- Educational and/or instructional preparation in either college level mathematics or statistics.
- Evidence of participation in student success initiatives in a post-secondary setting.
- Evidence of an ability to address the instructional needs of a diverse and frequently underprepared student population.
- Evidence of an ability to effectively engage with and facilitate authentic learning for students of diverse backgrounds, cultures, and experiences.
- Evidence of an ability to adapt teaching pedagogy to the knowledge level (developmental through transfer) and personality of each individual and class.
- Evidence of an ability to self-reflect and respond to an evidenced-based assessment of student learning.
- Desire and demonstrated ability to participate actively in department, division, and college committees and in the shared governance of Coast Community College District.
- Desire and evidence of an ability to take on leadership roles both within the department and in the institution as a whole.
- Ability to work with computers and use the Internet and interactive technologies to engage students in on-campus and online courses (where academically appropriate); and intrinsic motivation and ability to develop and teach online courses.
- Evidence of an ability to communicate effectively both orally and in writing.
- Evidence of experience in blending student success strategies, such as: goal setting, time- management, problem solving, study methods, and research skills into the curriculum. (Candidates who have not had such experience will be expected to gain these competencies during their first year, so that they are able to incorporate these strategies in their own courses.)

Supplemental Questions:

- Describe what teaching strategies you have used or would use to teach community college mathematics in a large class setting (over 50 students).
- Describe what teaching strategies you have used or would use to teach community college mathematics in an online setting.
- Describe any challenges you have experienced teaching transfer level mathematics courses and provide a specific example.
- What strategies do you use to ensure equity and inclusion in your a) in-person classes b) online classes? Please provide specific examples.
- Explain your understanding and cite specific examples of your working knowledge of current and emerging instructional delivery technologies. Describe your ability and/or experience in integrating those technologies into your teaching using different modalities.
- Explain your current and past involvement in professional development activities and campus/community service involvements.



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Program Classification (check all that apply)

- Instructor (transfer-level classes)
- Instructor (CTE classes)
- Instructor (ELL/ESL or non-credit)
- Counselor
- Librarian
- Other: Click or tap here to enter text.

Does this faculty request meet the criteria for extenuating circumstances beyond the department/program’s control since the last 2 program review cycles? (check all that apply)

- Untimely death or loss of faculty due to health conditions
- Sudden unexpected retirement or resignation
- Failed search since last PR cycle (i.e., The position was approved by the Exec team but not filled for any reason)
- Loss of tenure-track faculty
- Legal/mandatory requirements

| Describe what you checked above. |
|--|
| <p>AB 705 created an increased demand and enrollment for Liberal Arts Mathematics, College Algebra, College and Statistics courses starting in Fall 2018. These courses continue to be the primary FTES generating math courses. With the revisions of AB 705 and new, increased legal requirements with AB 1705, CA Community College math departments are focused with creating corequisite courses for now Business Calculus, and the STEM based calculus series. This increase in supplementary courses supports the need for a full-time math faculty.</p> <p>Moreover, as discussed previously AB 288 and the increase of dual enrollment through CCAP agreements, increases the number of math sections we need to staff. These dual enrollment courses are concentrated in Math 160 and Math 170 over the last three years at GWC.</p> |

Respond fully to each of the following two prompts. Your responses to the listed criteria and data parameters are the basis from which senators apply the criteria to determine the rating/ranking of this request. Be as specific as possible in your responses.

Program/Department Needs (1-10 points)

- 1 - 4 points: little or no contribution or impact
- 5 - 7 points: some contribution or impact
- 8 - 10 points: significant contribution or impact

How does this request for a faculty position meet the following criteria?



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Important considerations in this prioritization process are conditions unique to the program/department which support the need for additional full-time faculty, such as: (check all that apply and describe)

- Programs/departments with no or few full-time faculty to teach high demand area or for maintaining on-going (sequential) majors or certificates.
- Programs/departments with no or few full-time faculty.
- Negative impact created by the loss of full-time faculty due to retirement or non-replacement of full-time positions.
- There is not sufficient full-time faculty to develop and maintain current curriculum for the program/department.
- The program/department cannot maintain a stable core of full-time to part-time ratio to provide a quality program or program growth.
- There are substantial problems of coordination/supervision of the program's/department's part-time faculty. (There are not enough full-time faculty to coordinate, train, and supervise the part-time faculty).
- There is difficulty in finding and keeping qualified part-time faculty.
- Relevant, necessary courses are not taught or are cancelled because of the absence of qualified full or part-time faculty.
- New developments and/or trends in the service area that would influence a determination of need for the position.
- Supervision is required to reduce health and safety hazards.
- Preparation for careers/employment in fields with strong current and future prospects.

Describe what you checked above.

The combination of AB 1705 new requirements, AB 288, and guided pathways results in the need for another full-time math faculty at GWC.

As mentioned above, the legal requirement for AB 1705 increase the need for new courses, support courses, and interventions for students, particularly in the BTEM field. With an additional full-time faculty, the department will be able to build on the guided pathways initiative and improve the transfer rate to Universities with an AA/ADT in various programs. The department will be able to expand our Liberal Arts math, College Algebra, and Statistics offerings as part of the dual enrolment agreements and a full-time faculty will be beneficial in the coordination of these efforts with our feeder high schools.

The STEM and BSTEM pathways have increased the number of sections of College Algebra, College Algebra with Support, Statistics, and Statistics with Support taught. Maintaining program curriculum and standards has been a challenge due to the additional number of PT faculty hired to teach these courses, several of which are LCF (6 LHE). To ensure the integrity and quality of the courses, a new full-time faculty will be assigned to help coordinate the curriculum, student learning outcomes, and mentorship of part-time faculty. In addition, a new faculty will assist department colleagues in developing innovative program modules that address the learning gaps of incoming students post Covid.



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What program/department conditions (such as cutbacks, lack of offerings, no replacements, facilities, coordination of part-time faculty, new program requirements, etc.) support the need for additional full-time faculty?

The conditions that are a product of both AB 705, AB 1705, AB 288 and the pandemic aftermath simultaneously. There are more students enrolling in AB 705/1705 classes, especially statistics and college algebra that support the need and dual enrollment. The oversight that is required due to AB 1705 starting in Fall 2024 has increased, and coordination efforts must also increase to align with the need.

College-wide Needs (1-10 points)

- 1 - 4 points: little or no contribution or impact
- 5 - 7 points: some contribution or impact
- 8 - 10 points: significant contribution or impact

How does this request for a faculty position meet the following criteria?

Where other considerations are relatively equal, does the request for this position contribute to/impact the operations of other college programs such as: (check all that apply and describe)

- Coursework required or recommended for several degree/certificate programs.
- Significant general education requirements.
- Serve substantial numbers of the student population.
- Serve a special population of students not served by other programs.
- Application to Statewide Community College Goals of serving students in Transfer, Degree and CTE programs.
- New programs the college wants to develop and support through resources, facilities.
- Contributions to college and district goals including student equity.
- Negative fiscal impact to college created by the lack of full-time faculty due to retirement or non-replacement of full-time positions.

Describe what you checked above.

Transfer-level math courses are essential for many programs across the campus. Several of the department's transfer-level courses are required for AA degrees, CTE certificates, and transferability to four-year institutions. Specifically, College Algebra and/or Statistics are required for all STEM majors, nursing majors, business majors, and for general education requirements for transfer to many Baccalaureate programs.

AB 705/1705 requires that all new GWC students complete transfer-level math within their first year of enrollment, which elevates the role that math courses play in each student's success at GWC. The primary courses in high demand being College Algebra (with and without support), Statistics (with and without support), Business Calculus, Pre-calculus, and both Calculus 1 and 2.

The breadth of our course offerings ensures that a large intersectionality of diverse student populations enrolls and completes one or more college-level math courses. The Math department would like to build on this foundation to develop more innovative course modalities and develop curriculum to meet industry and student demands such as a



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course in Business Statistics and introductory level engineering courses. These new courses will further increase FTES as students will be able to complete their pathways to business and/or engineering degrees at GWC rather than looking at other college options.

The college has the infrastructure and capacity to offer new courses in mathematics and engineering that will further boost our profile in the community and build on our excellent STEM and BSTEM programs.

If there are any license, certifications, or degrees required for this faculty position, please describe them here.

Masters degree or higher in mathematics (theoretical, applied, statistics)

How does this position address long-term college goals and [Vision 2030 Goals](#)?

COLLEGE GOALS:

ENROLLMENT:

Math courses are a requirement for many majors and without adequate number of full-time faculty, the department is forced to cancel classes resulting in a decrease in enrollment and FTES. New faculty also bring innovation into our teaching methods. Their fresh perspectives and modern technologies make math courses more engaging and accessible. This, in turn, enhances student retention and encourages positive word-of-mouth recommendations.

EQUITY AND SUCCESS:

Math courses have traditionally been challenging for many students. Equity gaps persist in various demographics and impact the successful completion of students from their first year onward. Firstly, the introduction of new faculty members can bring a more diverse range of perspectives and backgrounds into the college. This diversity can be instrumental in creating a more inclusive learning environment where students from various backgrounds feel valued and represented. This, in turn, contributes to a sense of belonging and equity for all. Moreover, an increased number of faculty members allows for more personalized support for students. This is especially important for underrepresented or struggling students who may require additional assistance. One-on-one attention and guidance from faculty can bridge achievement gaps and lead to improved success rates.

COMPLETION:

Completion of degrees, transfer requirements, and some certificates relies on students being able to complete a transfer-level math course. Additional full-time faculty are essential for students to stay on the path to completion. Secondly, new faculty often bring innovative teaching methods and fresh approaches to the classroom. Engaged and motivated students are more likely to stay committed to their coursework and complete their courses successfully. Additionally, diversifying the course offerings becomes possible with the addition of new faculty. This means students have a broader range of options to choose from, aligning their interests and career goals with their courses, ultimately increasing their motivation to complete their chosen programs

WORKFORCE PREPARATION:

Analytical thinking via learning of math and statistics concepts continues to be important skills to acquire for any



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industry or professional work. The department will be able to expand our course offerings to meet industry and student demands. Moreover, with the introduction of new faculty, we can expand the scope of specialized courses. This means our students have the opportunity to gain specific, sought-after skills that align precisely with the evolving needs of the workforce. The presence of additional faculty members also opens up more avenues for career mentorship and guidance. This mentorship can be instrumental in helping students make informed choices about their career paths and in providing them with vital networking connections to the professional world.

FACILITIES:

The new Math/Science building has the capacity to accommodate additional math and engineering courses and provide students with services through the STEM Center.

PROFESSIONAL DEVELOPMENT:

A new faculty will bring new energy and ideas to the department that will encourage more professional development and innovative action plans. New faculty often bring fresh perspectives and expertise, contributing to a dynamic and intellectually stimulating environment. This diversity in thought can inspire professional growth among existing faculty, fostering a culture of continuous learning and innovation. Collaborative projects with new faculty, as well as across departments, can provide opportunities for professional growth by working on interdisciplinary initiatives. These collaborations can expand the horizons of existing faculty and foster a broader understanding of their field.

COMMUNICATION

A new faculty will enable the department to better communicate and coordinate our courses with our pool of part-time faculty ensuring that adequate student engagement and intervention is provided. Additionally, new faculty can contribute to a broader network of contacts and resources, which can facilitate communication and partnerships with external organizations, benefiting the college's outreach and engagement efforts.

If you have more than one faculty request, please rank this against your others.

For example, if you are requesting three (3) faculty for this discipline, you could put a "2" in this box, a "1" on the next request and "3" on the third. "1" being your first priority, "2", your second priority, and "3" your last priority. This will assist later reviews in better understanding the needs of your program and your preference. If you are only submitting one request, please leave this box blank.

Rank: Click or tap here to enter text.

Submitter's Signature: *Shawn M. Taylor*

Date: 10/27/2023

Supervisor's Review

As the supervisor of this program, I have reviewed this request.

No concerns

I have concerns



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Comments: Click or tap here to enter text.

Supervisor's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.

Vice President's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.

OFFICE USE ONLY

President's Recommendation:

- Hire position
- Hire one-year temporary
- Not hiring at this time

President's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.



Program Review Request- Facilities, Equipment, Technology & Other

Golden West College

FACILITIES, EQUIPMENT, TECHNOLOGY & OTHER FUNDING REQUEST

| | |
|-------------------------------|-----------------------|
| Submitter's First Name: | Shawn |
| Submitter's Last Name: | Taylor |
| Submitter's Email: | staylor3@gwc.cccd.edu |
| Submitter's Phone Number: | 714-955-1481 |
| Who is your Dean/Supervisor? | Danny Johnson |
| Are you the Department Chair? | Yes |
| Who is your Vice President? | Dr. Kay Nguyen |
| Program/Department: | Mathematics |

Type of Review:

Note: Library and Counseling should submit individual Program Reviews: one for Instruction and one for Student Services.

- Instruction
- Student Services
- Administrative

Directions:

- Fill out the GOAL section, including narrative (required) and include supporting data (if necessary/desired).
- Fill out the REQUEST FOR FUNDING section, indicating a request for Facilities, Technology or Equipment, including description of the item(s) being requested and total dollar amount.
- Fill out one form per GOAL/REQUEST FOR FUNDING.

GOAL

Description of Program's Goal (required):

Fully integrate the Starfish early alert system in all mathematics CRNs targeting at-risk math students.

Data to support the Program's Goal (if necessary/desired)

[Data Dashboards](#)

If additional data is necessary/desired, fill out a [Research Request](#) - May take up to 4 weeks

Click or tap here to enter text.

What actions will the program take to accomplish this goal?

Click or tap here to enter text.

What metric will you use to measure this goal?

Click or tap here to enter text.



Program Review Request- Facilities, Equipment, Technology & Other

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Which of the College’s missions and goals does this goal support? (Vision 2030)

- Enrollment
- Equity and Success
- Completion
- Workforce Preparation
- Facilities
- Professional Development
- Communication

Please describe how this goal supports the College’s missions and goals (Vision 2030).

Currently, each classroom has only one whiteboard located on the front wall. Having whiteboards affixed along the side walls of each classroom would allow for instructors to implement active learning pedagogies and engage students in collaborative efforts with one another, thus improving student success.

REQUEST FOR FUNDING

Request: What do you need to accomplish this goal? (Mark one per request)

- Facilities (e.g. improvements/repairs to classrooms, offices and buildings)
- Technology
- Equipment
- Other (e.g. conferences, funding for professional development)

Description of Item(s) / Cost

All requests must have a sales quote that includes:

1. Sales tax
2. Installation fee
3. Training fee
4. Service life agreement/fee

Please note: approved requests over 10k will need 3 quotes before purchase

| Description of Item(s) | Total Dollar Amount Requested |
|--|----------------------------------|
| Approximately 48 large magnetic white boards with installation: https://www.amazon.com/dp/B088QLGGCT/?coliid=I3IO5UO5EJ5GKD&colid=8QAV9UPVO70N&psc=1&ref_=list_c_wl_lv_ov_lig_dp_it | Approximately \$11,830 |
| Click or tap here to enter text. | Click or tap here to enter text. |



Program Review Request- Facilities, Equipment, Technology & Other

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| | |
|----------------------------------|----------------------------------|
| Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. |

Do you have any existing funds in your budget to cover this expense? Please describe.

No

Will there be an on-going cost for this request? What is the total cost of ownership?

No

Supervisor's Review

As the supervisor of this program, I have reviewed this request.

- No concerns
- I have concerns about this recommendation
- I believe department or wing funds exist to cover this request: partial full payment

Comments: Click or tap here to enter text.

Supervisor's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.

Vice President's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.

OFFICE USE ONLY

President's Recommendation:

- Funding recommended
- Funding not recommended

President's Signature: Click or tap here to enter text.

Date: Click or tap to enter a date.



Program Review Request- Facilities, Equipment, Technology & Other

Golden West College