



Program Review

Golden West College

General Information

Important Information

Some people have expressed concerns about losing information after being logged off. There are some ways to avoid this.

- Please type your information into a Word document then paste the information here.
- At the bottom of the page, there is a **“Save Progress”** button. That button can be very useful. However, if you have already been logged out due to a time error, it won't actually save the information to your account. To check to see if you have been logged out, a better approach is to click the **“Previous”** button. This will take you to the previous page AND it will save what you have typed on the current page. If you had been logged off, you will be immediately notified.

Submitter's First Name:

Submitter's Last Name:

Submitter's Email:

Submitter's ID:

Submitter's Phone Number:

Type of review? *

- Administrative
- Instruction (Please note: Library and Counseling should submit individual Program Reviews: One for Instruction and one for Student Services)
- Student Services

Who is your Dean/Supervisor?

- Robyn Brammer
- Joseph Dowling
- Rick Hicks
- Janet Houlihan
- Danny Johnson
- Claudia Lee
- Alice Martanegara
- Carla Martinez
- Alex Miranda
- Kay Nguyen
- Meredith Randall
- Christina Ryan Rodriguez
- Matthew Valerius
- Tim Vu
- Chris Whiteside

Are you the Department Chair? *

- Yes
- No
- Not applicable

Who is your Vice President? *

- Lee, Claudia
- Houlihan, Janet
- Randall, Meredith

If you experience any technical difficulties completing this form, please contact [Damien Jordan](#).

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-

Data Driven Decision Making

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

Program Review Reporting Cycle

1. Program Review will be conducted every two years beginning Fall semester 2021.
2. Department Chair/Originator will be given feedback at each step in the process.
3. Data provided by ORPIE, including statewide data for success given to departments the first week of October (October 8, 2021).
Originator: The originator owns this information (usually the Department Chair). The document is "locked" unless sent back.(October 22, 2021).
4. Department Chair: If the Department Chair did not submit the document, it will go to the Department Chair for general feedback (November 1, 2021).
5. Dean/Supervisor: The Dean/Supervisor provides feedback in a single text box. The Dean/Supervisor may send back to the Department Chair if something needs to be changed. (November 8, 2021).
6. IEC: IEC provides feedback for a technical review. (November 15, 2021).
7. CCD: provides feedback on curriculum or instruction section. (November 22, 2021).
8. Vice President: The identified VP provides feedback and can send the document back for edits (December 1, 2021).
9. Review: The Department Chair incorporates the feedback and resubmits. The Dean/Supervisor can send back if there is still something missing (January 31, 2022).
10. Submission: Once the originator (Department Chair) submits the document, it will be locked (February 11, 2022).
11. Committee Reviews: Requests for funding will be sent to committees for their review (February 11, 2022). Reviews by committees must be submitted to Planning and Budget by March 15, 2022.
12. Hiring Deadline: Approved requests for faculty positions will be provided by the Executive Team (February 25, 2022).
13. Hiring Deadline: Ratings for classified professional positions will be provided to the Executive Team by April 22, 2022.
14. Funding Deadline: Planning and Budget will make determinations on Categorically funded requests (April 22, 2022).
15. General Funds and Classified positions: Items funded through general funds and available Classified Professional Positions will be determined (October 7, 2022).

Important Update

Some people have expressed concerns about losing information after being logged off. There are some ways to avoid this.

1. Please type your information into a Word document and then past the information here.
 2. At the bottom of the page, there is a "**Save Progress**" button. That button can be very useful. However, if you have already been logged out due to a time error, it won't actually save the information to your account. To check to see if you have been logged out, a better approach is to click the "**Previous**" button. This will take you to the previous page AND it will save what you have typed on the current page. If you had been logged off, you will be immediately notified.
-

Program Information

Name of Program (Academic Programs should be listed per discipline)

* Physics

Please provide a brief description and any significant change in your program since the last program review cycle.

The physics program prepares students for further study in physics or related physical science disciplines. It also provides a background in physics that includes skills appropriate for entry-level employment in science-related industries or laboratories. Coursework includes instruction in all of the main areas of classical physics, exposure to some of the more modern concepts of physics, and prepares students to think critically and apply reasoning skills to analyze real world situations.

The Covid-19 pandemic has caused us to teach all of our physics courses in a fully remote manner from the middle of the spring 2020 semester through the summer 2021 term. Even now only one of our physics courses is taught on campus. This has also forced faculty into an unfamiliar teaching modality, which disrupted the quality of our instruction. Much has been learned about remote instruction techniques during the past year and a half, but that learning has come at a cost.

Konrad Stein, one of our tenured faculty, retired after decades of outstanding service to the college.

We moved into the new Math & Science building.

What are your program's strengths?

The physics courses offered by our department range from those capable of meeting the needs of non-science majors to those required of students majoring in chemistry, geology, physics, engineering, biology, and health careers. We pride ourselves on our rigorous courses that well prepare students for the next course in the sequence or in their major. We reach all of these students with a limited number of full-time faculty. Members of the faculty and staff work well in a collegial atmosphere, with full-time faculty mentoring and supporting the part-time faculty. Our students consistently transfer to CSU and UC campuses, are awarded scholarships and internships, and continue on to professional or graduate programs in their fields.

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

Teaching remotely has been a significant challenge and major disruption to the achievement of our goals. Hispanic/Latinx students continue to be the largest disproportionately impacted group. The physics department does not have enough working equipment to conduct some important laboratory experiments. Moreover, those experiments that are being performed in physics are out of date and in need of an upgrade.

INSTRUCTIONAL PROGRAMS

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

- * Yes
 No

What type of awards does your program offer?

- Certificates
 AA/AS Degree
 Associate Degree for Transfer

Please provide the information for the number 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	* 0	* 0	* 0
Associate Degrees	* 37	* 11	* 25
Associate Degrees for Transfer	* 23	* 12	* 16

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, Planning, and Institutional Effectiveness (ORPIE).

* The number of AS degrees awarded in the past two years (11 and 25) is significantly less than the number awarded three years ago (37). Similarly, the number of ADT degrees awarded in the past two years (12 and 16) is significantly less than the number awarded three years ago (23). The number of degrees awarded three years ago was particularly large because three years ago (2018-2019) was the year GWC began auto-awarding degrees. The number of AS and ADT degrees awarded during the three most recent years seems quite good.

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 four years ago, two years ago, and this year.

Please note: For programs with earned credit, please use FTESr/FTEF. For non-credit or the International Students Program, please use FTESm/FTEF.

FTES/FTEF ratio from 3 years ago

* 33

FTES/FTEF ratio from 2 years ago * 31

FTES/FTEF ratio from last year * 38

Outside of hiring new faculty (which should be included in your program goals, if needed), please discuss this trend and your plan for improving efficiency

The trend in efficiency is increasing. The current rate is quite high, near the maximum. An improvement is unnecessary.

Using the data received from Office of Research, Planning, and Institutional Effectiveness (ORPIE), what strategies has your department implemented over the past two years to be more inclusive of the distinct student populations you serve?

* One goal from our previous program review was to pursue the creation of a special embedded tutoring offering for Hispanic/Latinx students in an effort to develop a sense of community and belonging among these disproportionately impacted students and so decrease their achievement gap. We investigated the possibility of enacting this goal, but were dissuaded from doing so by the Equity Squad. The Equity Squad felt it was an ineffective means of addressing the achievement gap.

The sudden pivot to remote instruction caused by the Covid-19 pandemic occupied almost all of our time and energy, preventing us from taking further action on this matter.

Identify challenges and successes with respect to mode of delivery and/or technology. For instructional programs, address any differences between on-campus and distance education.

Remote instruction has been a challenging adjustment for physics. For the lab portion of remote physics courses it isn't possible to offer hands-on instruction to our students. Students are still able to analyze data, but they aren't able to experience the hands-on acquisition of data, which has diluted the quality of our course offerings. For the lecture portion of physics courses instruction has been challenging because of the faculty's inexperience at teaching via this modality. One particular challenge of remote instruction has been that of connecting with students.

However, the forced move to remote instruction did bring about benefits--painfully won benefits--but benefits nonetheless. Faculty have learned a great many remote instruction techniques and improved their ability to implement these techniques. These new skills will undoubtedly be helpful in the future, whether we be teaching a traditional on-campus course or a hybrid one.

Program Review Curriculum

After a thorough review of your courses, provided by CCI...

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 or more years for a CTE course)?

- Yes
 No

For classes where the date of revision is more than 6 or more years for a transfer-level-course or 3 or more years for a CTE course, revisions for all such classes to CCI are required within the next two academic years.

- I understand

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

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

- Yes
 No

SLOs must use different wording than the Course objectives. SLOs should reflect the objectives without mirroring the language. You indicated that one or more of your courses needs to have a revision submitted to CCI within the next two academic years.

- I understand

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

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.

Once we finalize the above, we will make multiple options available for faculty to complete.

How are you using your Program SAOs/SLOs to improve your program outcomes? (If you are not actively using SAOs/SLOs to improve program outcomes, discuss how you plan to do so in this coming Program Review Cycle.)

While we have program SLOs we have not been assessing them. We will begin assessing our program SLOs in an effort to improve our program outcomes.

Program Review Goals and Requests for Funding

Requests – If you are requesting any of the following, they *MUST* be addressed within your Department goals.

- Faculty
- Equipment, Facilities, Technology
- Support Staff

(When you click that you need any of the above (Faculty, Equipment, Facilities, Technology or Support Staff) you will be provided the appropriate form on subsequent pages of this document)

Vision 2030 Goals Legend

1. **Enrollment:** GWC will increase credit and noncredit enrollment while providing efficient 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 College Goals.
7. **Communication:** GWC will effectively communicate and collaborate within the College and its communities.

Goals from Previous Program Review Cycle

Please refer back to the goals from 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.

Goal 1: Obtain a dedicated budget to fund our laboratory classes.

This goal was accomplished. A dedicated budget to fund the operation of our laboratory classes is now available.

Goal 2: Review our schedule of courses to verify that they allow students to obtain the degrees offered by our department in the minimal amount of time.

This goal was accomplished. Our courses are currently scheduled so that students can obtain the degrees offered by our department in the minimal amount of time.

Goal 3: Pursue the creation of a special embedded tutoring offering for Hispanic/Latinx students in an effort to develop a sense of community and belonging among these disproportionately impacted students and so decrease their achievement gap.

We investigated the possibility of enacting this goal, but were dissuaded from doing so by the Equity Squad. The Equity Squad felt it was an ineffective means of addressing the achievement gap.

Goal 4: Develop and implement one or more surveys to better determine the needs of our students.

A survey was developed and administered to students, but the responses from that survey have not been analyzed.

Goal 5: Improve our outreach activities.

The Covid-19 pandemic largely halted our outreach activities. A start was made on goal of organizing a speaker series involving professional scientists talking about their work. One professional scientist was able to give a talk before the campus closure necessitated by the Covid-19 pandemic.

Goals for Current Program Review Cycle

Current goals should be connected to Vision 2030.

Goal 1 (Required)

Description of Program's Goal

Improve our outreach activities. (This was also a goal of our previous program review. The onset of the Covid-19 pandemic halted our progress on it.)

What actions will the program take to accomplish this goal?

Develop sets of science demonstrations for various age groups. Work with the college outreach specialist to create informational brochures describing our program and organize on-campus outreach events. Identify professional scientists, ideally individuals whose race, ethnicity, or special population status matches that of the groups we serve who are experiencing a disproportionate impact, willing to talk about their work.

What metric will you use to measure your goal?

The number of current and potential students who attend one of our outreach events. We'll also look to see if it leads to an increase in our enrollment.

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

Requests: What do you need to accomplish this goal? (Mark any or all that apply)

Please note: Indicating one of the following will create a form to appear on a subsequent page.

- Faculty
- Facilities
- Technology
- Equipment
- Professional Development (funding request)
- Support Staff (permanent classified)
- None of the above

Goal 2 (Required)

Description of Program's Goal

Modernize the physics lab curriculum.

What actions will the program take to accomplish this goal?

We will request the purchase of new equipment in order modernize the physics lab curriculum. Additionally, new lab exercise procedures will be created so that students can complete the new, more modern lab exercises.

What metric will you use to measure your goal?

Revising three labs each semester will be considered a success.

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

Requests: What do you need to accomplish this goal? (Mark any or all that apply)

- Faculty
- Facilities
- Technology
- Equipment
- Professional Development (funding request)
- Support Staff (permanent classified)
- None of the above

Goal 3 (Required)

Description of Program's Goal

Secure the quality of our stockroom operations. We currently have a part-time night stockroom manager. This individual has been working at GWC for many years. This long-term employment has made them highly effective and efficient in their position, so much so that they are currently doing the work of two people. If our current part-time night stockroom manager were to leave GWC, we would not be able to effectively replace them. Any replacement at the same level would be doing the work of one person, not two. This leaves our department in a precarious position. (The stockroom serves all of the programs in our department.) If our current part-time night manager were to leave, a conceivable result given that their compensation is insufficient for their work, the support provided to our academic programs would be drastically reduced, lessening our ability to serve the needs of our students.

What actions will the program take to accomplish this goal?

We will request the hiring of a night-time stockroom manager. We will request that this hiring be a ten-month employee, a hire at the 113 level.

What metric will you use to measure your goal?

The hiring of a night-time stockroom manager will be our measure of success.

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

Requests: What do you need to accomplish this goal? (Mark any or all that apply)

- Faculty
- Facilities
- Technology
- Equipment
- Professional Development (funding request)
- Support Staff (permanent classified)
- None of the above

Goal 4 (Optional)

Description of Department's Goal

Reduce the achievement gap observed in student success rates for Hispanic/Latinx students, the largest of our disproportionately impacted groups.

What actions will the program take to accomplish this goal?

We will seek advice from the Equity Squad on how we can reduce the achievement gaps observed in our courses. We will pursue professional development activities in order to learn relevant instructional techniques.

What metric will you use to measure your goal?

We will look for a reduction in the achievement gaps experienced by Hispanic/Latinx students.

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

Requests: What do you need to accomplish this goal? (Mark any or all that apply)

- Faculty
- Facilities
- Technology
- Equipment
- Professional Development (funding request)

- Support Staff (permanent classified)
- None of the above

Please describe the type of Professional Development required.

* We require training in methods for reducing the achievement gaps experienced by Hispanic/Latinx students in our courses.

When do you plan to implement this Professional Development.

* During the current two-year

What budget will this require?

* Depending on where the tra

Goal 5 (Optional)

Description of Department's Goal

Establish one or more partnerships with local businesses so that these local businesses see our students as their first choice for internships and jobs.

What actions will the program take to accomplish this goal?

We will contact local businesses and ask what their staffing needs are and explain how our students can meet those needs as either interns or employees.

What metric will you use to measure your goal?

One or more local businesses agreeing to contact us when they need an intern or employee will be considered a success.

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

Requests: What do you need to accomplish this goal? (Mark any or all that apply)

- Faculty
- Facilities
- Technology
- Equipment
- Professional Development (funding request)
- Support Staff (permanent classified)
- None of the above

OTHER INFORMATION

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

Optional file upload (if desired)

Optional file upload (if desired)



Program Review

General Fund
Classified Professional Request

How many Classified Professional Requests would you like to submit?

- 1
- 2
- 3
- 4

1st Classified Position Request

POSITION REQUESTED

- Replacement Position (Previously funded/ not currently funded)
- New Position (Never been funded/newly created)

SALARY REQUESTED (Click here to see the [salary schedules](#))

Salary Schedule (e.g., EE)

Range (e.g., 116)

Job Title (should match description below)

Please use a mid-level step for salary:
Salary (e.g., \$50,000)

Contract

- 12 month
- 11 month
- 10 month
- 100% FTE
- Other FTE %

JOB DESCRIPTION SUMMARY

For reference, please see the current [Organizational Chart](#) for the campus.

Please provide the job title and description-URL for your proposed position. You may find a list of approved job descriptions from the [CCCD Position Description portal](#).

For example, Accessible Media Specialist. URL: https://navigator.cccd.edu/district/hr/classification_and_compensation_study/Documents/Classified%20Specifications%20A/Accessible%20Media%20Specialist.pdf

If the job description is not listed above, you may copy and paste your job description here.

What are the essential duties this position will fulfill?

1. Works with faculty/instructional administrator to design, construct, troubleshoot, modify or rebuild equipment, modules, experiments that will be used in the classrooms/ laboratories in a division comprised of various related but different subject areas.
2. Assists in laboratory preparation for all assigned Chemistry classes.
3. Creates written instructions for use of lab services and computer equipment, as necessary. Creates answer keys for sample materials for all materials in instructional materials files.
4. When performing setup, calculates amounts and portions such as mass, volume, length, percentage, concentration levels, angles, etc. Safely keeps and properly disposes and/or takes down the experiments and simulations.
5. Makes repairs to equipment and learning assistance devices. Checks out and maintains control over tools, equipment, supplies, materials used by students. May be required to maintain contact with appropriate vendors.
6. Maintains records of laboratory activity, including typing forms or inputting data or otherwise retaining information regarding the acquisition, maintenance and distribution of tools, equipment, materials, supplies, and/or written materials.
7. Provides for the general cleanliness and security of the laboratory or shop work area. Handles and disposes of harmful or hazardous materials according to specific instructions relating to their disposal. Participates in providing for a safe environment for the conduct of the laboratory. Reports maintenance problems as they occur.
8. Attends training as necessary to maintain currency of knowledge and communicates safety concerns and necessary updates to supervisors.
9. Performs other related duties as assigned that support the objective of the position.
10. Required to abide by all District policies and procedures including Board Policy 3050 - Code of Professional Ethics.

JUSTIFICATION

What is the compelling need for the position? Please include any consequences if this position is not filled?

If the full-time position is approved, will there be a request for funding for short-term temporary position during the hiring process?

- Yes
- No

Program Needs (50 points):

Explain the conditions that are unique to the program/department which support the need for additional full-time classified staff and how this position addresses

those needs. If this position is not filled, explain the consequences on the program/department that will result. Please use information from program review. [Click here to enter text.](#)

* Not hiring this position puts the quality of our program in jeopardy. Our current part-time evening stockroom assistant has over a decade of acquired experience and knowledge with laboratory preparation and maintenance. Much of their experience and responsibilities involve the handling, use, and disposal of hazardous organic chemical reagents. Their long-term employment has made them highly effective and efficient in their position, so much so that they are currently doing the work of two people. If our current part-time night stockroom assistant were to leave GWC--a real possibility given that they are doing the work of two people and being paid for the work of one--we would not be able to effectively replace them since replacing them would likely require hiring multiple part-time employees with at least a bachelor's level understanding of organic chemistry. A 10-month full-time evening stockroom manager position would properly reflect the level of contribution attributable to our current evening assistant. Moreover, this one position would cost less than two or more part-time hires.

College-Wide Priority (30 points):

How does this request align and directly support the Strategic Plan? How does this position address stated long-term college priorities identified by [Vision 2030](#).

* Enrollment: This hire allows us to maintain the quality of the program's lab offerings. The quality of our program is what drives our enrollment.

Equity and Success: This hire is vital to maintaining the quality of our program. If the quality of our program decreases, our students will have less success in efforts to transfer and join the workforce.

Completion: The stockroom supports all of the courses in the program, from the first to the last. The stockroom and its staff are essential to our being able to offer courses that contain the educational experiences necessary for the successful completion of degrees and certificates.

Workforce Preparation: The stockroom primarily supports lab instruction, which is where students acquire the hands-on skills prized by employers. Without this support from the stockroom, the quality of our program offerings decreases, lessening the acquisition by students of the skills they need to be prepared to join the workforce.

Facilities: This position plays a role in the care of the stockroom and labs on the third floor of the Math & Science building.

Professional Development: The enhancement of this position over the current one provides its holder an incentive to pursue professional development activities. When the college demonstrates that it values its employees, they reward it with an increased commitment to developing their professional skills.

Communication: This position regularly communicates with the day-time stockroom manager and night-time faculty, both full- and part-time, within the program.

Contributions to Other College Operations (20 points):

To what extent would the position requested benefit or serve other departments, programs, or plans?

* The night-time manager of the stockroom serves all of the programs within the Department of Physical Sciences: Chemistry, Geology, Physics, Astronomy, and Physical Science.

This position will regularly communicate with and aid the instructional assistants in the Biology stockrooms.

You have more than 1 classified professional request.

Please rank this request against your others. For example, if you are requesting 3 classified professionals for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

* 1

Supervisor's Review

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

- * No concerns
- I have concerns

Comments:

*



Program Review

One-Time Funding Request Equipment, Technology, and Professional Development

How many funding requests would you like to submit?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

1st Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax
- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

\$ 12,687

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for items from Pasco Scientific. It is for twelve 850 universal interfaces and one CAPSTONE software license. These are the interfaces necessary for all of the following Pasco Scientific lab kits. The large cost is partly due to the request involving twelve copies of each kit, so that students in the physics lab can work in groups of three.

Support of College Goals: How does this request align and directly support the College's Goals? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of Key Performance Indicators associated with the College goals.

Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.

Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.

Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.

The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.

Funding this request would provide a professional development opportunity for our full-time physics instructor. Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

These items will only be used by the physics program.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

1

Supervisor's Review

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

- No concerns
- I have concerns

Comments:

I have read and support the review.

2nd Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax
- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

\$ 7,032

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for items from Pasco Scientific. It is for twelve BASIC CURRENT BALANCES and twelve THE CURRENT BALANCE ACCESSORY KIT SF-8608. The large cost is partly due to the request involving twelve copies of each kit, so that students in the physics lab can work in groups of three.

Support of College Goals: How does this request align and directly support the College's Goals? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of Key Performance Indicators associated with the College goals.

Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.

Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.

Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.

The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.

Funding this request would provide a professional development opportunity for our full-time physics instructor.

Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

These items will only be used by the physics program.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

3

Supervisor's Review

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

- No concerns
- I have concerns

Comments:

I have read and support the review.

3rd Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax
- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for items from Pasco Scientific. It is for twelve INDUCTION WANDS EM-8099, twelve PASSPORT 2 AXIS MAGNETIC FIELD SENSORS PS-2162, twelve PASSPORT ROTARY MOTION SENSORS PS-2120A, and twelve VARIABLE GAP MAGNETS EM-8618. The large cost is partly due to the request involving twelve copies of each kit, so that students in the physics lab can work in groups of three.

Support of College Goals: How does this request align and directly support the College's Goals? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of Key Performance Indicators associated with the College goals.

Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.

Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.

Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.

The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.

Funding this request would provide a professional development opportunity for our full-time physics instructor. Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

These items will only be used by the physics program.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

Supervisor's Review

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

- No concerns
- I have concerns

Comments:

4th Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax
- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

\$ 4,760

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for items from Pasco Scientific. It is for twelve RESISTIVITY APPARATUS EM-8812, twelve RESISTOR CAPACITOR INDUCTOR NETWORK UI5210, and twenty CURRENT PROBE PS- 2184. The large cost is partly due to the request involving twelve copies of each kit, so that students in the physics lab can work in groups of three.

Support of College Goals: How does this request align and directly support the College's Goals? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of Key Performance Indicators associated with the College goals.

Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.

Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.

Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.

The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.

Funding this request would provide a professional development opportunity for our full-time physics instructor. Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

These items will only be used by the physics program.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

5

Supervisor's Review

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

- No concerns
- I have concerns

Comments:

I have read and support the review.

5th Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax

- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

* \$ 4,428

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

*The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for items from Pasco Scientific. It is for twelve PASSPORT TEMPERATURE SENSORS, twelve ENERGY TRANSFER-CALORIMETERS, and twelve Pasport DUAL PRESSURE SENSORS. The large cost is partly due to the request involving twelve copies of each kit, so that students in the physics lab can work in groups of three.

Support of College Goals: How does this request align and directly support the College's Goals? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of Key Performance Indicators associated with the College goals.

*Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.

Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.

Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.

The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.

Funding this request would provide a professional development opportunity for our full-time physics instructor.

Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

*These items will only be used by the physics program.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

*These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

*6

Supervisor's Review

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

- No concerns
- I have concerns

Comments:

*I have read and support the review.

6th Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax
- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

* \$ 6,893

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for items from Pasco Scientific. It is for twelve Reflection and Refraction ex-9987, twelve PHYSICAL PENDULUM SET ME -9833, twelve PASPORT ROTARY MOTION SENSOR PS-2120A, twelve ROTATIONAL INERTIA ACCESSORY ME-3420, one BRAIDED PHYSICS STRING SE-8050, and twelve VOLTAGE SENSOR UNSHROUDED UI-5100. The large cost is partly due to the request involving twelve copies of each kit, so that students in the physics lab can work in groups of three.

Support of College Goals: How does this request align and directly support the College's Goals? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of Key Performance Indicators associated with the College goals.

Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.

Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.

Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.

The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.

Funding this request would provide a professional development opportunity for our full-time physics instructor. Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

These items will only be used by the physics program.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

7

Supervisor's Review

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

- No concerns
- I have concerns

Comments:

I have read and support the review.

7th Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax
- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

\$ 14,400

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make

significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for twelve laptop computers. The equipment from Pasco Scientific requires a computer for its use.

Support of College Goals: How does this request align and directly support the [College's Goals](#)? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of [Key Performance Indicators](#) associated with the College goals.

Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.

Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.

Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.

The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.

Funding this request would provide a professional development opportunity for our full-time physics instructor. Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

These laptop computers would also be used by the physical science and chemistry programs.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

2

Supervisor's Review

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

- No concerns
- I have concerns

Comments:

I have read and support the review.

8th Equipment/Technology/Facilities/Professional Development Request

TYPE OF FUNDS REQUESTED (Note: This form CANNOT be used for any personnel requests, including faculty, classified, and hourly positions.) Please only select one type of request.

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

Please note that all requests will need the following information:

- Sales tax
- Installation fee
- Training fee
- Service life agreement/maintenance/fee

Approved requests over \$10,000 will need 3 quotes before purchase.

Total dollar amount for this request:

\$ 1,300

Does this request address a clear health and safety issue?

- Yes
- No

Program Needs: What program conditions support the need for the requested funds, and how does this request address those needs? Please provide data to support the need for this request.

The physics lab curriculum is old and out of date. It requires a massive overhaul. This request would make significant progress to that end. This request would allow changes to be made to all six physics courses.

This request is for a charging cart to store the twelve laptop computers in.

Support of College Goals: How does this request align and directly support the [College's Goals](#)? Please cite the college goal or strategic priority that the request will support. Please describe how this request (if funded) will lead to the improvement of [Key Performance Indicators](#) associated with the College goals.

Enrollment: GWC will increase credit and noncredit enrollment while providing efficient academic programs and student services.

Funding this request will improve the efficiency of the physics program by allowing for a more efficient use of classroom time through the use of higher quality lab equipment that provides accurate data.

Equity and Success: GWC will support, enhance, and develop equity-minded services and academic programs that lead to student success.
Funding this request will provide more equitable access to lab equipment in physics lab courses.

Completion: GWC will ensure students' timely completion of degrees and certificates by providing high quality academic programs and student services.
Funding this request will allow us to provide a high quality physics program.

Workforce Preparation: GWC will support student success by developing and offering academic programs and student services that maximize career opportunities.
The equipment in this request are relatively modern, closer in type to what our students would use in a job setting, so it does a better job of preparing them for the workforce.

Professional Development: GWC will support the success of all employees by providing professional development opportunities that focus on the achievement of College Goals.
Funding this request would provide a professional development opportunity for our full-time physics instructor.
Writing lab procedures for the use of experimental equipment and questions that ask students to analyze the data collected from those equipment is a considerable undertaking for a physics instructor, one that greatly improves their skills as an instructor.

Contributions to Other College Operations: Will the item requested benefit and/or serve other departments, programs, or plans? If so, how?

These laptop computers would also be used by the physical science and chemistry programs.

Demonstrates long-term cost savings or improves program efficiency or effectiveness: If funded, how will this contribute to long-term cost savings for the college or improve program efficiency and effectiveness?

These upgraded physics lab equipment lead to more accurate experimental results. More accurate experimental results are easier to interpret, making clearer the connection between physics theory and physics applications. The clearer the connection between physics theory and physics applications, the easier it is to synthesize physics knowledge.

Please rank this request against your others. For example, if you are requesting 3 equipment/facility/professional development requests for this program, you could put a "2" in this box, a "1" in the next box, and a "3" in the final request box. This will help later reviews better understand the needs of your program and your preference for hiring. If you only have 1 request, please put a "1" here.

8

Supervisor's Review

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

- No concerns
- I have concerns


Comments:

I have read and support the review.

General Information

You have finished your Program Review! Your supervisor, IEC, and (possibly) CCD will review your submission and provide feedback.

Please note, you will only be able to edit this form again if it is returned to you from your supervisor or your VP. Please stay in touch with your supervisor, if you receive feedback that you wish to incorporate.

...343533234
 11/28/2021, 3:10 PM
Signature Date

Review Feedback

Dean/Supervisor: Please provide feedback on this Program Review

Deans/Supervisors - If you would like to return this document to the originator, prior to IEC's review, please DO NOT CLICK NEXT here.

Instead, please click on "Return for Revision" (bottom of page) to send the document to the originator.

If you sign the document, it will go forward to IEC.

You will get another chance to review the document after IEC, CCD (if instructional), and the Vice President have provided comments.

IEC: Please provide feedback on this Program Review

Goal 3 - There is a request for a classified manager (ten-month employee, 113 level). However, the corresponding request page for a staff member was not completed. Please complete the staff request form)

Dean's Second Review

Superuser final check

CCD Reviewer

1. **Once you click the checkbox button below, scroll to the bottom and**
2. **Click on "Return for Revision" to send the document to the originator. DO NOT CLICK NEXT. When you click on Return for Revision, you will be given a page to provide your feedback.**

I have completed the CCD Review

Vice Presidents - If you would like to return this document to the originator, prior to the Dean's 2nd review, please DO NOT CLICK NEXT here. Instead, please click on "Return for Revision" to send the document to the originator. If you want to see the document again, please remove any comments from this page and add your comments on the email page that appears after you return the document.

If you sign the document, it will go back to the dean for a final review. If the dean forwards the document without returning it, the document will be locked, and the originator will not be able to incorporate the feedback from the reviewers.

Please provide feedback here. When finished, click on "Return for Revision" at the bottom of this page.

Vice President: Please provide feedback on this Program Review

DEAN'S ASSESSMENT OF POTENTIAL FUNDING METRICS

Which of the following *might* be a potential funding source for any of your requests? (Mark all that apply - or skip if not applicable)

- Equity:** Help disproportionately impacted students outside the classroom to either come to the college (access), stay in college (retention), complete transfer-level math or English, complete their degree/certificate, or transfer to a 4-year institution.
- Higher Education Emergency Relief Fund (HEERF II):**
Assist students impacted by the COVID-19 pandemic
- Lottery:**
Purchase of instructional materials to be used by students in the classroom.
- State Funded Equipment:**
Any equipment considered that will last more than a year and costs more than \$5,000 that is used within the classroom.
- Workforce Development:**
Improve the access, retention, or degree/certificate/career attainment for students in non-credit, Career Education, or career development

Supervisor/Dean
Signature

Electronically signed by Rick Hicks on 10/31/2021 4:12:45 PM

IEC Signature

Electronically signed by Robyn Brammer on 11/15/2021 11:03:14 AM