ANNUAL
REPORT OF PROGRAM DATA
2022

UNIVERSITY of HAWAI'I
HAWAI'I
COMMUNITY COLLEGE

July 1, 2021 through June 30, 2022

A.S. in Natural Science

1. Program or Unit Description

Program or Unit Mission or Purpose Statement
What is the target student or service population?

The Associate in Science in Natural Science (NSCI) Degree program prepares students to transfer to 4-year institutions in STEM (Science, Technology, Engineering and Mathematics) related fields. Hawai‘i Community College offers two NSCI tracks: Biological Science (NSCI-BSC) and Physical Science (NSCI-PSC).

The NSCI-BSC and NSCI-PSC are designed to provide a transferable degree to students interested in life and physical sciences. Students who graduate from the NSCI Program transfer within the University of Hawai‘i system as juniors ready to take more specialized 300- and 400-level courses. It is targeted towards high school students with an interest in science. For West Hawai‘i residents, this program provides the opportunity to attend school locally while completing the first two years of courses necessary for a four year science degree.

2. Analysis of the Program/Unit

UHCC Annual Report of Program Data (VARPD)

Discuss the program’s or unit’s strengths and areas to improve in terms of Demand, Efficiency, and Effectiveness based on an analysis of the program’s ARPD Quantitative Indicators or comparable unit-developed measures or program-developed metrics. Include a discussion of relevant historical-trend data on key measures (i.e., last three years). Provide an explanation of any significant changes to the program’s Quantitative Indicators or unit’s key performance measures in the year of this Review.

Instructional programs must include a discussion of ARPD health indicators with benchmarks to provide a quick view on the overall condition of the program. CTE programs must include an analysis of Perkins Core indicators for which the program did not meet the performance level in the year of this Review.

ARPD data for the NSCI Program can be found at:
https://uhcc.hawaii.edu/varpd/index.php?y=2022&c=HAW&t=GPP&p=2648

Overall the NSCI program is listed as PROGRESSING. It is listed as having NEEDS ATTENTION Demand, PROGRESSING Efficiency, and PROGRESSING Effectiveness. However, the Efficiency indicator seems to be miscalculated – according to the Rubric, the indicator for Efficiency should be HEALTHY (please see below for the calculation). The final

program health rubric indicates that even with the miscalculated Efficiency score, the overall health should still be PROGRESSING because a score of Needs Attention (0), Healthy (2), and Progressing (1) with a total of 3 points, falls into the Progressing (2-4) category. With the corrected Efficiency score, the overall score is 3 and still in the PROGRESSING category, despite the error.

Demand health is defined by the "Percent Change in Majors from the Previous Year." The NSCI decreased from 51 majors in 2021 to 49 in 2022, a slight decrease of 3.9 (4)%. In 2019-2020, we had 46 majors, so while there was a slight decrease in the number of majors, we still have more majors than we did two years ago. The Student Semester Hours (SSH) were lower for all metrics listed - a trend for these metrics since 2020 except for non-majors courses. These trends are not surprising given that the majority of classes moved online in 2020 across the UH System due to the COVID-19 pandemic. The FTE in program courses also dropped from 20 to 16, as did the total number of classes taught (21 to 16). In the past, both Manono and Pālamanui courses were taught face-to-face on both campuses. With lowered enrollment since Fall 2020 across the campus, sections were combined into synchronous, online modalities accessible to students on both campuses and taught by only a single instructor. The development of online courses on all campuses in the UHCC system also allowed students to take these courses in online modalities at other campuses that might fit with their schedule, even if they were offered on our campus.

Efficiency health is defined by the "Course Fill Rate" and the "Number of Majors to FTE BOR-appointed Faculty." Although the program is still progressing, we have improved from 2021 on the Course Fill Rate indicator. Our Course fill rate is nearly 63% ("PROGRESSING", an increase of 3.3% from the previous year), and this is up from 60% in 2021, and 57% in 2020, despite the decrease in SSH in program courses in recent years. We have a "HEALTHY" number of majors to faculty (16). According to the rubric, the Efficiency indicator is calculated by giving 2 points to a HEALTHY score on either of the metrics and 1 point to a Cautionary (C)/PROGRESSING score on either of the metrics, then dividing this by 2. Scores of 1.5 are to be rounded up to 2 which indicates that we have a HEALTHY score for this metric. The calculation is shown on Page 8 of the rubric provided on the ARPD site:
https://uhcc.hawaii.edu/varpd/downloads/2022_ARPD_GPP_Glossary.pdf

The Effectiveness indicator is defined as the "Persistence of Majors from Fall to Spring." The program has a 63% persistence rate, which is in the "PROGRESSING" category. Although there is reason to work on this metric, the metric has shown a steady increase of 10% since 2020, and the program is moving in a good direction. Additionally, the Fall to Fall persistence has also increased by 22% since 2020. Since 2021, Completion dropped slightly (1%) but Withdrawals decreased by 22%.

The pandemic-inspired changes to course delivery continue to affect the landscape of distance education on our campus. There was a notable increase from zero Distance Education (DE) courses in 2020 to ten in 2021, and in 2022, there was a slight decrease to eight as faculty began to return to face-to-face teaching. From 2021 to 2022, there was a corresponding decrease in enrollment of DE students from 151 to 137 DE students. Successful completion also decreased slightly by 12%, but was close to that of overall courses (69%). Fall to Spring Persistence decreased from 63% to 53%, and is lower than overall courses (63%) indicating that remote teaching and learning continues to be

areas that need improvement for retaining students. Most of the 2021-2022 period was still focused on faculty fostering effective distance learning strategies. The department that houses the program lost three faculty members in the prior academic year, in Spring 2021, as well as two APT-laboratory coordinator positions. The loss of faculty and support staff continues to put additional stress and requirements on those faculty who continue to teach.

There was a 700% increase in the number of degrees awarded (from 1 in 2021 to 8 in 2022) and we attribute this to the accessibility of having online courses and students returning to their educational journeys after the pandemic. Interestingly, we awarded 1 additional STEM Degree for the program than the number of degrees awarded during this year. The number of students who transferred to a UH 4-year campus before getting their degree doubled (from 7 to 14) which indicates that we are losing students to the four-year campuses before they complete their degree with us. This may be due to the fact that currently, we are not offering any of the Physics courses (PHYS151/L, 170/L, 272/L) or 200-level Biology courses (BIOL265/L, 275/L) required by the degree pathways, and students must take courses elsewhere in order to finish their degree.

Discuss significant program or unit actions and activities over the year of this Review. Include new certificate(s), stop outs, gain/loss of position(s), organizational changes, changes in unit operations or responsibilities, etc. Include a discussion of external factors affecting the program or unit.

Instructional programs must provide the URL for the program's ARPD data tables and attachment(s) for relevant program-developed metrics discussed in this Review; non-instructional units must provide URLs for unit-specific data and attachment(s) for relevant unit-developed metrics discussed in this Review.

Faculty in our program have focused on professional development through AVID and other training designed to improve student engagement and success. In the past, the NSF Bridges to Baccalaureate grant (B2B) has allowed us to support underrepresented STEM students to train as peer mentors to other science students. We have applied for a second round of this grant (B2B-STAMP-TWO), slated to begin in Fall 2022, which will provide stipends for peer mentors and undergraduate research experiences (something new on our campus), as well as performance-based stipends for promising STEM students in their first year of the program. In January 2021, we began participation with UHMC on their Project Kaihuwa'a NSF grant designed to provide scholarships to students intending to pursue a bachelor's degree in engineering. Recruitment of student scholars began in Fall 2021 and we currently have a cohort of 51 students. All of these activities help to equip, empower, and energize students in their academic and professional paths in STEM.

Discussion of 2020 Comprehensive Report Action Goals:

Action Goal 1:
Advocate for the development of infrastructure to support science instruction, including a physics lab at both Manono and Pālamanui and a laboratory prep room at the Manono biology laboratory. This action goal is a continuation of the goal from our 2016 Comprehensive Report and we will continue to work towards it until it is completed.

The physics laboratory at Pālamanui campus was completed in AY2020-21, however in the reporting period, there were still few face-to-face courses due to the pandemic, and lecturers in Physics were also few and far between. Funding for a Physics laboratory and Biology prep room at the Manono campus has been allocated and construction should begin in Spring 2023. We hope to provide Physics courses on both campuses in Fall 2023. Renovation of the STEM Center on the Manono campus was completed Summer 2022, and will provide three new classrooms, a student study room, a copier room, and six faculty offices.

Action Goal 2:
Advocate for increased faculty support and personnel, including the permanent confirmation of laboratory coordinators for both Pālamanui and Hilo campuses, and a faculty position in physics. We recognize that additional time will be required to achieve this due to financial constraints and a hiring freeze related to the Covid-19 pandemic.

This action goal is ongoing and we are continuing to advocate for laboratory coordinators and for the replacement of faculty positions on hold due to the pandemic. We submitted a Critical-to-Fill form to the UH System for both Mathematics and Physical Science positions. Both were approved. We were successful in recruiting and hiring a Mathematics faculty, and they begin their position in Fall 2022. Recruiting for the Physical Science position is still in progress.

Action Goal 3:
Increase funding for lab supplies and equipment, including pursuit of external funding.

We continue to work on this Action goal. We applied for HEERF funding through the college to support purchase of new equipment and lab supplies for both campuses. Additionally, we were able to secure University of Hawaii Foundation donations from the community for $28,975.00 for the "Researchers in Academia Fund" to support purchasing equipment to be able to offer the BIOL275L Cell and Molecular Biology Laboratory on our campuses, and $31,483.00 for the "TMT Physics Equipment Lab Fund" for Physics equipment for the Manono campus. These donations and additional funding will help us to offer students the missing Biology and Physics degree pathway courses that we are currently unable to offer.

Action Goal 4:
Increase funding for professional development of science faculty within their field of study.

Professional development (PD) funds are currently available through HEERF funding, but travel was limited due to the pandemic. We will continue to encourage faculty to apply for this funding, as travel restrictions are lifted to ensure that our faculty can stay current in their fields of expertise.

Action Goal 5:
Work with the College to provide clean and accurate data on program measures.

We continue to provide feedback on the ARDP data that are not accurate

Action Goal 6:
Create a First Year Experience (FYE) course specifically for NSCI majors.

Due to the pandemic, we have not begun work on this action goal yet but will continue to work towards creating a FYE science course.

Action Goal 7:
Collaborate with UH Hilo to create an articulation pathway with the Marine Science degree and NSCI.

While the goal to create/teach marine science courses at HawCC is important and valuable, it does not align with current campus needs or enrollment. In light of declining enrollment, faculty shortages, and the need to grow existing programs - particularly the AS-NSCI program - within our department, the addition of new programs and/or major changes to current programs are not feasible at this time. We are researching and obtaining data for how marine science courses might fit into degree programs on our campus and at all UH campuses in preparation for when this might be more appropriate, but are currently focused on prioritizing current curriculum and program needs. In Fall 2021, our Department voted to add a new Ecosystem and Environment Science track to the AS-NSCI program, but it was not approved at the UH-System level and we are not offering it on our campus.

Action Goal 8:
Increase faculty office space on the Pālamanui and Manono campuses

With the renovation of the STEM Center on the Manono campus completed in Summer 2022, this space will provide three new classrooms, a student study room, a copier room, and six new faculty offices. After a faculty retirement at the Pālamanui campus, we were also able to obtain an additional science faculty office space for Fall 2022.

Action Goal 9:
Improve teaching spaces on the Pālamanui and Manono campuses

The physics laboratory at Pālamanui campus was completed in AY2020-21, however in the reporting period, there were still few face-to-face courses due to the pandemic, and lecturers in Physics were also few and far between. Funding for a Physics laboratory and Biology prep room at the Manono campus has been allocated and construction should begin in Spring 2023. We hope to provide Physics courses on both campuses in Fall 2023. Renovation of the STEM Center on the Manono campus was completed Summer 2022, and will provide three new classrooms, a student study room, a copier room, and six faculty offices.

Action Goal 10:
Provide science-specific tutoring and peer mentors at both Pālamanui and Manono campuses

Steps toward providing in-person science-specific tutoring and mentoring were curtailed by the pandemic and renovation activities at the Pālamanui campus and the STEM Center on the Manono campus. However, we continue to work with The Learning Center to provide remote tutoring services. As stated earlier, we have applied for a second round of this grant (B2B-STAMP-TWO), slated to begin in Fall 2022, which will provide stipends for peer mentors on both campuses.

Action Goal 11:
Provide supplies such as laptops and software for faculty to excel in their positions

Due to increased funding for off-campus teaching during the pandemic, we have been able to provide laptops for all of our faculty. Additionally, the college obtained professional-level subscriptions for several online applications, such as Padlet, Kahoot, and EdPuzzle that have been provided to interested faculty.

3. Program Student Learning Outcomes or Unit/Service Outcomes

a) List all Program Learning Outcomes (**PLO**s) or Unit/Service Outcomes (**UO**s) and their alignment to the College's Institutional Learning Outcomes (**ILO**s).

   a. Analyze data effectively using current technology
      i. ILO2: Utilize critical thinking to solve problems and make informed decisions.
   b. Communicate scientific ideas and principles clearly and effectively
      i. ILO1: Communicate effectively in a variety of situations.
   c. Analyze and apply fundamental mathematical, physical, and chemical concepts and techniques to scientific issues
      i. ILO2: Utilize critical thinking to solve problems and make informed decisions.
   d. Apply fundamental concepts and techniques in their chosen concentration
      i. ILO2: Utilize critical thinking to solve problems and make informed decisions.

b) List the PLOs or UOs that have been assessed in the year of this Review. Instructional programs must list the courses that have been assessed in the year of this Review and identify the alignment(s) of Course Learning Outcomes (**CLO**s) to the PLOs. If no assessment was conducted in the year of this Review, provide an explanation and schedule

of upcoming planned assessments.

All four Program Learning Outcomes (PLO) were assessed during this period.
These are the courses assessed during AY2021-2022. CHEM 161/161L and 162L were also on the assessment schedule (Fall 2021 and Spring 2022, respectively), but did not get assessed and/or no reports were submitted. The Department Chair will continue to work with the faculty and assessment coordinator to get these rescheduled and completed.

- Fall 2021
  - CHEM 161 General Chemistry I (Closing the Loop) - NOT ASSESSED
  - CHEM 161L General Chemistry I Laboratory (Closing the Loop) - NOT ASSESSED

- Spring 2022
  - BIOL 172 Introductory Biology II (Closing the Loop)
  - BIOL 172 Introductory Biology II Laboratory (Closing the Loop)
  - CHEM 162L General Chemistry II Laboratory (Closing the Loop) - NOT ASSESSED

The PLO alignment to CLOs of courses assessed (and supposed to be assessed) during this period is shown in Table 1 below.

Table 1: Alignment of NSCI PLOs to CLOs of BIOL 172, BIOL 172L, CHEM 161, and CHEM 161L, MATH 241, MATH 242

	BIOL 172	**BIOL 172L**	**CHEM 161**	**CHEM 161L**	**CHEM 162L**
PLO1: Analyze data effectively using current technology.				CLO 2	CLO 2
PLO2: Communicate scientific ideas and principles clearly and effectively.				CLO 3	CLO 3
PLO3: Analyze and apply fundamental mathematical, physical, and chemical concepts and techniques to scientific issues.	CLO 3	CLO 3	CLO 1, 2	CLO 1, 2, 3	CLO 2,3
PLO4: Apply fundamental	CLO 1, 4	CLO 1, 2	CLO1, 2	CLO 1, 2	CLO 1, 2, 3, 4

concepts and techniques in their chosen concentration.					

c) Assessment Results: provide a detailed discussion of assessment results at the program (PLO) and course (CLO), or unit (UO), levels in the year of this Review. Provide an analysis of how these results reflect the strengths and challenges of the program or unit in meetings its Outcomes.
d) Changes that have been made as a result of the assessment results: instructional programs must provide a discussion of changes made as a result of the analysis of assessment results, e.g., to curriculum, instruction, development of student learning opportunities, faculty professional development activities, assessment strategies, etc.; non-instructional units must provide a discussion of changes made as a result of the analysis of assessment results, e.g., to services, operations, personnel training, assessment strategies, etc.

The results of the PLO assessment are as follows:

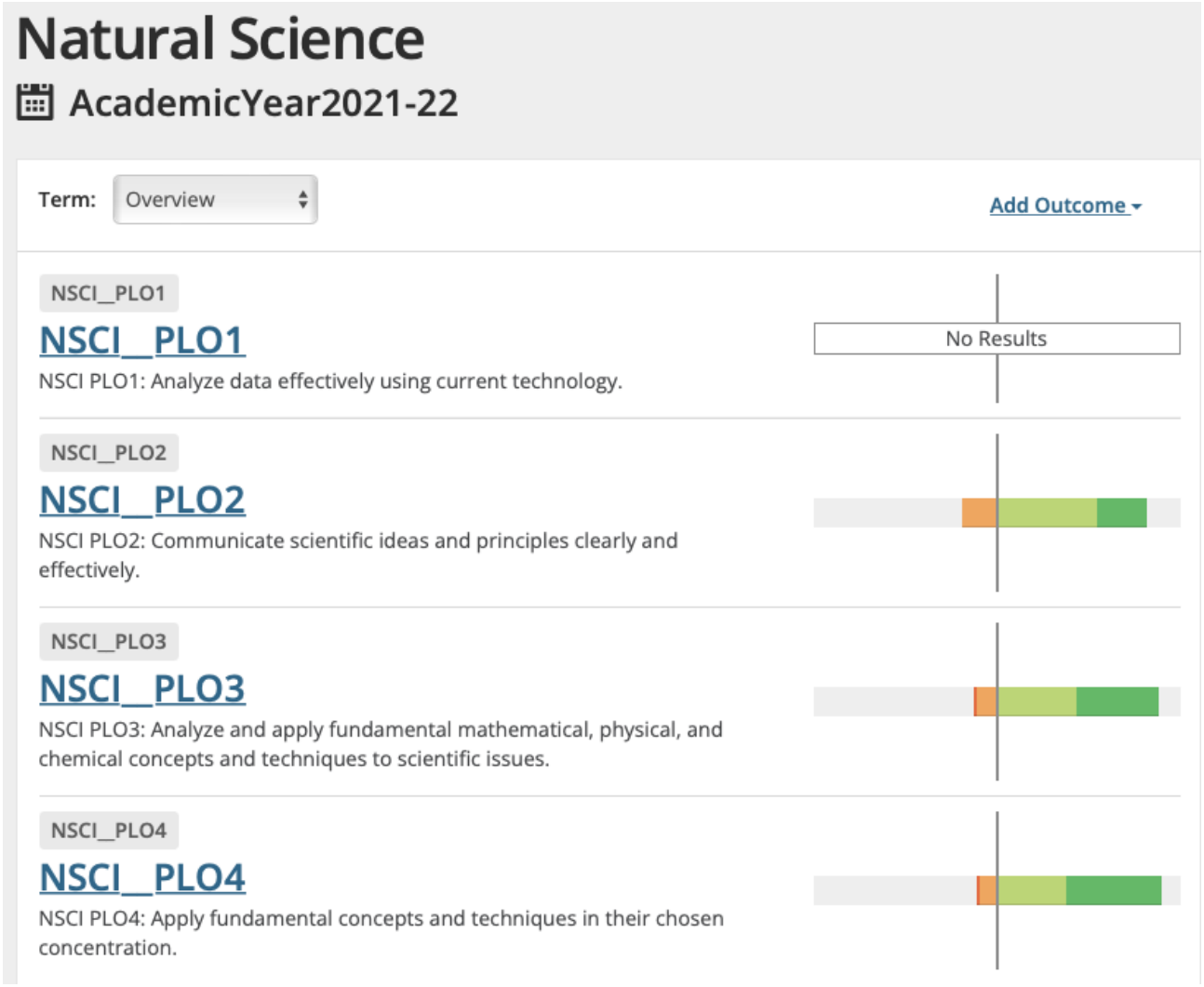

Table 2: Evaluated Results in percentage for Academic Year 2021-22

	# assessed	Not Met	Partially Met	Met	Exceed
NSCI PLO1	0				
NSCI PLO2	11	0.00%	18.18%	46.15%	27.27%
NSCI PLO3	67	1.49%	10.45%	43.28%	44.78%
NSCI PLO4	70	1.43%	8.57%	37.14%	52.86%

As shown in Table 1, PLOs #1 and 2 are aligned with CLOs from the two chemistry labs (CHEM 161L and CHEM 162L), which were not assessed. The other two PLOs are aligned with CLOs from all five courses assessed during this review period, but show results for only the BIOL courses that were assessed. For all PLO except for PLO1, which is only assessed through the Chemistry courses, the majority of students met or exceeded the program learning outcomes (73.42%% for PLO #2, 88.06% for PLO #3, and 90.0% for PLO #4). The following are a short summary of each course assessment.

BIOL 172 (Introductory Biology II): This was a Closing the Loop assessment.

One (CLO2) of the four CLO was not assessed because the topic is not covered in this course. The change to CLOs for this course is scheduled to take place starting Fall 2022.

The majority of students (100% or 79% 14 students) met or exceeded the expectations for the CLOs assessed by exam questions, which were improvement from the previous year. This also exceeded our expectation of 70% CLO attainment (meeting/exceeding the CLO). Since the previous year, we incorporated more in class small group activities and comprehension questions on homework assignments to develop students critical thinking skills.

Action plan:

We will continue to use active learning strategies to improve students' comprehension, in particular, focusing more on higher order thinking-application and analysis skills.

BIOL172L (Introductory Biology II Laboratory: This was a Closing the Loop assessment.

For this class, we use a lab report (CLOs 1 and 2) and a small group project (CLO3) to assess the CLOs.

For the lab report, students have the entire semester (and also building upon their skills from BIOL171L from the previous semester) to develop and fine tune their lab report skills. Out of the eleven students who turned in the lab report at the end of the semester, 82% met or exceeded these CLOs, which was below the last year's CLO attainment level of 92%, but was still above our expectation of 75% CLO attainment. Since last year, we added more critical thinking questions in our lab manual to assess students' deeper understanding of lab topics. We also modified their lab notebook to require students to synthesize and analyze materials in each lab. Due to these changes, we noticed improvement in the quality of their writing. Most of the mistakes on the lab reports came from students entering materials in wrong section of the lab report, not the analysis of the data. In the future, we will modify the current grading rubric to reflect criteria specific to data analysis, critical thinking, and formatting. As we observed in last year's assessment, we continue to have problems with students not turning in the final lab report (three students did not turn this assignment in). We have hoped to improve assignment completion through diligently referring them to academic support services along with direct feedback by the instructors to help them turn in assignments. It's possible that with some students, even this amount of hands-on attention is not enough to encourage them to finish all assignments, especially a large final assignment like this one. Going forward, the instructors will continue to focus on student support. To further address the challenge, we will also like to try a "critical friend" approach (Costa & Kallick, 1993) where a time will be set aside in class to discuss the lab report with an assigned peer/critical friend. It is hoped that the in-person peer feedback (as opposed to anonymous peer review) will encourage students to complete the assignment. *Reference*: Costa. A.L. & Kallick, B. (1993, October). Through the lens of a critical friend. Educational Leadership, 51(2). https://www.ascd.org/el/articles/through-the-lens-of-a-critical-friend

For the small group research and presentation, we expected 75% CLO attainment, but the result exceeded our expectations (93% meeting/exceeding out of 14 students). Noticeably, we had more students exceeding (77%) the CLOs than last year. We believed that this is because we modified the assignment to focus on group presentation and introduced the project prior to the spring break to provide more time for out of class collaborative work. From this assessment, we found that although students went above and beyond on their presentation, they included many extraneous details but was unable to pare down information to identify the most important information. We also noticed that students seemed to miss an important understanding regarding the evolutionary relationships and trends in animal diversity. In order to help students avoid "bingeing" on information on the internet, we plan to introduce a jigsaw activity that requires students to complete a worksheet that help them distill the key information at home and work collaboratively in class using the worksheet to create an evolutionary tree.

CHEM 161 (General Chemistry I): This was a Closing the Loop assessment.

No assessment was completed.

CHEM 161L (General Chemistry I Laboratory): This was a Closing the Loop assessment.

No assessment was completed.

CHEM 162L (General Chemistry II Laboratory):

No assessment was completed.

Summary of the strengths and challenges for the ASNS program, based on assessment data here.
NOTE: This discussion is only from BIOL course assessment.

STRENGTHS

- Small size of the class allows us to build rapport, be flexible with teaching styles, and address the needs of each student.
- Having students two consecutive semesters allows them to build upon skills from previous semesters to develop and fine tune.

CHALLENGES

- It would be nice to have more students (i.e. larger sized classes) because assessment results can be skewed.
- It's difficult to get a comprehensive view of the program since assessment was only completed for the Biology courses.

4. Action Plan

Based on findings in Parts 1-3, develop an action plan for your program or unit from now until your next Review, or as appropriate, update the action plan provided in your last Comprehensive Review.

Be sure to focus on areas to improve as identified in ARPD data or unit-developed measures, the results of assessments of student learning or unit/service outcomes, and results of survey and other data used to assess your program or unit.

This action plan must include an analysis of progress in achieving previous planned improvements including the results of the prior Comprehensive Review's action plan(s). Discuss how the goals identified in that prior action plan were met and the impact on the program or unit; or, if not met, discuss why and the impact on the program or unit, and whether those goals are being carried over to the current action plan.

This action plan should include specific recommendations for improvement(s) or planned program or unit action(s) that will guide your program/unit through to the next program/unit Review cycle. The plan must include details of measurable outcomes, benchmarks and timelines.
* CTE programs must include specific action plans for any Perkins Core Indicator for which the program did not meet the performance level.

Specify how the action plan aligns with the College's Mission and Strategic Plan. Include a discussion of how implementing this action plan will contribute to the College achieving the goals of the Strategic Plan.
https://hawaii.hawaii.edu/sites/default/files/assets/docs/strategic-plan/hawcc-strategic-directions-2015-2021.pdf

Be sure to list resources that will be required, if any, in section 5 below.

*The action plan may be amended based on new initiatives, updated data, or unforeseen external factors between now and the next Comprehensive Review.

Action Goal 1:
Advocate for increased faculty support and personnel, including and most importantly the permanent confirmation of laboratory coordinators for both Pālamanui and Hilo campuses and a faculty position in physics. We recognize that additional time will be required to achieve this due to financial constraints and hiring freeze related to the Covid-19 pandemic, however, without laboratory coordinators, faculty are spending weekends and evenings prepping labs due to limited lab space, taking away from their primary duty of teaching and greatly increasing stress and decreasing morale. This action goal is a continuation and modification of a goal from our 2020 Comprehensive Report and we will continue to work towards it until it is completed. The request for new positions in the first row in the table below relates to this goal.

Action Goal 2:
Increase funding for lab supplies and equipment, specifically for new lab courses that will need to be offered. The development of these new courses (BIOL275L and Physics Labs) requires new equipment to maintain the supplies that we have ordered and secured through HEERF funding. Equipment required for BIOL275L includes a -80C freezer for both campuses to maintain molecular stocks and DNA for longer periods of time than 1 year (With the new yeast and bacterial strains that we now order, glycerol stocks last for a few months at -20C, so a -80C freezer would allow us to avoid ordering these expensive stocks every year. At this time, we are specifically requesting only the freezers (quote attached to Kuali request). Physics labs are being constructed and will require equipment in future years. This action goal is a continuation and modification of the goal from our 2020 Comprehensive Report and we will continue to work towards it until it is completed. The request for equipment funding in the second row of the table below relates to this action goal.

Action Goal 3:
Increase funding for instructional support and professional development for the faculty teaching AS-NSCI courses within their field of study. Instructional support takes the form of providing software for faculty such as Labster and Visible Body for online science labs, which help faculty to provide high-quality simulations for students. While some Professional Development funding is available through HEERF, all faculty in science should be attending at least one conference yearly in their field, at a minimum, every other year, in order to maintain fidelity in their discipline. Science rapidly changes and new advancements happen quickly, so even OER texts are often not up to date. This would require conference registration fees and travel expenses for these conferences, and also provides for faculty to take students to showcase their research. Professional society memberships and subscriptions to selected journals could also help faculty to do this throughout the year. This action goal is a continuation and modification of the goal from our 2020 Comprehensive Report and we will continue to work towards it until it is completed. Thus, the request to fund conference attendance in the third row of the table below relates to this action goal.

Action Goal 4:
Work with the College to provide clean and accurate data on program measures. This action goal is a continuation and modification of the goal from our 2020 Comprehensive Report and we will continue to work towards it until it is completed. ARPD data for Demand health indicators have repeatedly been incorrectly reported for multiple years in a row.

Action Goal 5:
Create a First Year Experience (FYE) course specifically for NSCI majors. This action goal is a continuation and modification of the goal from our 2020 Comprehensive Report and we will continue to work towards it until it is completed.

Action Goal 6:
Provide science-specific tutoring and peer mentors at both Pālamanui and Manono campuses. This action goal is a continuation and modification of the goal from our 2020 Comprehensive Report and we will continue to work to improve science tutoring at both campuses. Movement towards this

goal has been made but until the B2B-STAMP-TWO grant is awarded, we are unable to support multiple peer mentors.

Action Goal 7:
Provide additional outreach to high schools for the AS-NSCI program on both campuses to recruit new students into the program. This is a new goal for the program.

Action Goal 8:
Offer the remaining Physics (PHYS151/L, 170/L, 272/L) Biology (BIOL275/L and 265/L) on both campuses. This is a new goal for the program, but one that will be helped with the completion of the physics lab and biology prep room on the Manono campus.

Action Goal 9:
Realign the MATH241 and MATH242 courses into the AS-NSCI program. These are STEM courses but are currently listed under the Liberal Arts program in Kuali.

5. Resource Implications

* Special Resource Requests not included in operating "B" budget *

Detail any special, one-time or personnel resource requests in the categories listed in the table below that are not included in your regular program or unit operating "B" budget.

*Note: CTE programs seeking future funding via UHCC System Perkins proposals must reference their ARPD Section 4. Action Plan and this ARPD Section 5. Resource Implications to be eligible for funding.

☐ **I am NOT requesting additional resources for my program/unit.**

☐X I AM requesting additional resource(s) for my program/unit.
Total number of items being requested: ____3_____(4 items max.)

*For each item requested, make sure you have gathered the following required information and all relevant documentation before you upload this Review; you will submit all information and attachments for your **Resource Request** as part of your Review document submission via the

Hawaii CC - Program & Unit Review Submission portal
https://hawaii.kualibuild.com/app/builder/#/app/60ef56c477b0f470999bb6e5/run

- ✔ **Item Description**
- ✔ **Justification**
- ✔ **Priority Criteria** (must meet at least one of the following):
  1. Ensure compliance with mandates and requirements such as laws and regulations, executive orders, board mandates, agreements and contracts and accreditation requirements.

2. Address and/or mitigate issues of liability, including ensuring the health, safety and security of our Kauhale.
3. Expand our commitment to serving all segments of our Hawaii Island community through Pālamanui and satellite centers
4. Address aging infrastructure.
5. Continue efforts to promote integrated student support in closing educational gaps.
6. Leverage resources, investments with returns, or scaling opportunities
7. Promote professional development.

Category-Specific Information				
Personnel Resource Priority Criteria: 1, 2, 3, 5	ASAP	2 FTE; APT; Laboratory Coordinator (Hilo and Pālamanui)	$85,000	Was an Existing Position Abolished? (YES); Position # 0079296T & 0077365T
Equipment Priority Criteria: 1, 2, 3, 4, 5	ASAP	Lab equipment and supplies for new and existing courses (physics, cell biology, etc)	Total Cost (with S&H, tax): $14,500	On Inventory List (NO);
Professional Development Priority Criteria: 5, 7	Variable	Have you applied before (Yes); was it approved? No	Instructional Software, Professional society memberships, conference registration and travel for faculty	PD Details; Impact: Keep faculty up-to-date in field of study; Total Cost: $10,000

6. Optional: Edits to Occupation List for Instructional Programs

Review the Standard Occupational Classification (SOC) codes listed for your Instructional Program and verify that the occupations listed align with the program learning outcomes. Program graduates should be prepared to enter the occupations listed upon program completion. Indicate in this section if the program is requesting removal or additions to the occupation list.

☐X **I am NOT requesting changes to the SOC codes/occupations listed for my program.**

☐ **I am requesting changes to the SOC codes/occupations listed for my program.**

O*Net CIP-SOC Code Look-up

in the **Crosswalks box, choose "Education," then enter CIP number to see related SOC codes*

List below each SOC code for which change is being requested and include details of requested code deletions and/or additions. Include justification for all requested changes.

*All requested changes to the SOC codes/occupations listed for programs must be discussed with and approved by the Department/Division Chair.

QUOTATION

Quote Number	Valid From	Valid To	Page
8031980460	10/27/2022	01/25/2023	1 of 1

Currency	Sales Representative	Customer Reference
USD	Daniel Hughes	

To Place an Order	
Phone :	1-800-932-5000
Fax :	1-866-329-2897
Web :	www.vwr.com

When placing your order, please include your quotation number and account number to ensure you receive the correct price.

THANK YOU FOR THE OPPORTUNITY TO EARN YOUR BUSINESS.

Quote Prepared For	Contact Phone / Fax / E-Mail
Laura Hall	+18089698854 lhall3@hawaii.edu

Ship To : 80126477	Sold To : 80126477
HI COMMUNITY COLLEGE TAX EXEMPT 1175 MANONO ST HILO HI 96720	HI COMMUNITY COLLEGE TAX EXEMPT 1175 MANONO ST HILO HI 96720

Row	VWR Catalog Number	Product Description	Qty	UOM	Unit Price	Extended Price
20	MISC-NONCORDFS	MV85-1/benchtop freezer/EA	1	EA	7,232.21	7,232.21
	Customer Ref # : MV85-1 Product Ships Directly from Manufacturer **benchtop freezer** **in stock**					Availability :

Item Total : 7,232.21

Quote Total : 7,232.21

Financing Available. Contact your VWR Representative for details about flexible financing programs.

VWR International's Terms and Conditions of Sale apply. A copy is available on our website (https://us.vwr.com/store/content/externalContentPage.jsp?path=/en_US/about_vwr_terms_conditions_product_sales.jsp), or by request. Customer represents that it has read and agrees to VWR International's Terms and Conditions of Sale.

Identified stock status is based on product availability at time of the quote and may change at time of order. Delivery dates are based on standard lead times from suppliers.

Charges displayed on the quotation including freight, tax and other charges are estimates and may vary at time of order.

Any images used are not necessarily representative of any product offering from VWR International and do not constitute the basis for purchase decisions.

Customer is responsible for unloading and providing standard receiving facilities for large and/or heavy shipments. Special unloading or delivery can be arranged, provided VWR International is notified at the time of order placement. For such arrangements, please contact VWR International for a quotation. All quotes for installation assume that services related to the equipment are in place at the Customer site (including, but not limited to, gas, plumbing, electrical and ventilation) as per the equipment manufacturer's specifications prior to the installation of the equipment. Installation or other services are not included in this quotation, unless otherwise noted on the quotation.

Customer has a limited amount of time to document and report any shipping damage. Please inspect all shipments upon receipt and refer to Section 4 of VWR International's Terms and Conditions of Sale for additional information.

Items prefixed with "MISC" are subject to regulatory approval once VWR International receives acceptance from the customer. They are special order, and as such may not be returnable. Please allow 6-8 weeks delivery from the time of your first order or acceptance of this quotation.