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**Notice of Meeting
UNIVERSITY OF HAWAI'I**

BOARD OF REGENTS COMMITTEE ON ACADEMIC AND STUDENT AFFAIRS

Members: Regents Wilson (Chair), Acopan (Vice-Chair), Acoba, Bal, and Haning

Date: Thursday, May 5, 2022

Time: 11:00 a.m.

Place: University of Hawai'i at Mānoa
Information Technology Building
1st Floor Conference Room 105A/B
2520 Correa Road
Honolulu, HI 96822

See the Board of Regents website to access the live broadcast of the meeting and related updates: www.hawaii.edu/bor

AGENDA

- I. Call Meeting to Order**
- II. Approval of Minutes of the February 3, 2022 Meeting**
- III. Public Comment Period for Agenda Items:**

All written testimony on agenda items received after posting of this agenda and up to 24 hours in advance of the meeting will be distributed to the board. Late testimony on agenda items will be distributed to the board within 24 hours of receipt. Written testimony may be submitted via the board's website through the testimony link provided on the [Meeting Agendas, Minutes and Materials](#) page. Testimony may also be submitted via email at bor.testimony@hawaii.edu, U.S. mail at 2444 Dole Street, Bachman 209, Honolulu, HI 96822, or facsimile at (808) 956-5156.

Those wishing to provide oral testimony virtually may register [here](#). Given the constraints with the format of hybrid meetings, individuals wishing to orally testify virtually must register no later than 7:00 a.m. on the day of the meeting in order to be accommodated. Registration for in-person oral testimony on agenda items will also be provided at the meeting location 15 minutes prior to the meeting and closed at the posted meeting time. It is highly recommended that written testimony be submitted in addition to registering to provide oral testimony. Oral testimony will be limited to three (3) minutes per testifier.

All written testimony submitted are public documents. Therefore, any testimony that is submitted orally or in writing, electronically or in person, for use in the public meeting process is public information and will be posted on the board's website.

- IV. Agenda Items**

- A. Recommend Board Approval of Established Status for the PhD Program in Nutritional Sciences at the University of Hawai'i at Mānoa (UHM)
 - B. Recommend Board Approval of Established Status for the Bachelor of Arts in Astronomy and the Bachelor of Science in Astrophysics at UHM
 - C. Recommend Board Approval of Provisional Status for the Master of Architecture Degree at UHM
 - D. Recommend Board Approval of Established Status for the Bachelor of Arts in Biochemistry and Bachelor of Science in Biochemistry Degrees at UHM
 - E. Recommend Board Approval of Established Status for the Bachelor of Arts in Pacific Island Studies at UHM
 - F. Recommend Board Approval of Established Status for the Master of Arts in Heritage Management at the University of Hawai'i at Hilo
 - G. Recommend Board Approval of a New Provisional Certificate in Labor Studies at the University of Hawai'i – West O'ahu
 - H. Academic Program Actions Report
 - I. Small Programs and Program Review Report
 - J. Recommend Board Approval of Revisions to Regents Policy 5.201, Instructional Programs
 - K. Committee Annual Review
- V. Adjournment**

DISCLAIMER – THE FOLLOWING ARE DRAFT MINUTES AND ARE SUBJECT TO FURTHER REVIEW AND CHANGE UPON APPROVAL BY THE COMMITTEE

MINUTES

**BOARD OF REGENTS COMMITTEE ON ACADEMIC AND STUDENT AFFAIRS
MEETING**

FEBRUARY 3, 2022

Note: On January 26, 2022, Governor David Y. Ige issued a proclamation related to the COVID-19 emergency that temporarily suspended Section 92-3.7, Hawai'i Revised Statutes (HRS), "only to the extent necessary to suspend the requirement to have at least one meeting location that is open to the public".

I. CALL TO ORDER

Chair Ernest Wilson called the meeting to order at 10:12 a.m. on Thursday, February 3, 2022. The meeting was conducted virtually with regents participating from various locations.

Committee members in attendance: Chair Ernest Wilson; Vice-Chair Kelli Acopan; Regent Simeon Acoba; and Regent William Haning.

Committee members excused: Regent Eugene Bal.

Others in attendance: Board Chair Randy Moore; Regent Wayne Higaki; Regent Benjamin Kudo; Regent Alapaki Nahale-a; Regent Diane Paloma; Regent Robert Westerman (ex officio committee members); President David Lassner; Vice President (VP) for Community Colleges Erika Lacro; VP for Legal Affairs/University General Counsel Carrie Okinaga; VP for Research and Innovation Vassilis Syrmos; UH Mānoa (UHM) Provost Michael Bruno; UH Hilo (UHH) Chancellor Bonnie Irwin; UH West O'ahu (UHWO) Chancellor Maenette Benham; Leeward Community College (LeeCC) Chancellor Carlos Peñaloza; Executive Administrator and Secretary of the Board of Regents (Board Secretary) Kendra Oishi; and others as noted.

II. APPROVAL OF MINUTES

Chair Wilson stated that the minutes of the October 7, 2021, committee meeting had been distributed and inquired as to whether committee members had any recommended corrections. Hearing none, the minutes were approved.

III. PUBLIC COMMENT PERIOD

Board Secretary Oishi announced that the Board Office did not receive any written testimony and that no individuals signed up to provide oral testimony.

IV. AGENDA ITEMS

A. Academic Program Actions

1. Review and Recommend Board Approval of the Following UHM Programs:**a. Establishment of a Provisional Bachelor of Arts in Marine Biology (BA MB)**

Prior to providing information on UHM's educational program requests, Provost Bruno explained that UHM strives to provide efficient and effective academic programming at its campus through strategic program investments. In keeping with these efforts, he noted that a total of 12 academic programs have been terminated or stopped out since spring 2020. While requests were being made to provisionally establish or make permanent four programs, it has been determined that these programs respond to a community need, address student demand, and capitalize on the university's existing strengths.

Provost Bruno provided an overview of the request to establish a provisional BA MB program at UHM that will provide students with a degree option that would prepare them for a diverse array of non-research ocean-related careers. The BA MB program will be offered alongside an existing Bachelor of Science in Marine Biology (BS MB) program which had an enrollment census of 516 students as of fall 2021 but involves a more rigorous, scientific aspect of this field of study. It is anticipated that the flexibility in course offerings and career options upon degree completion provided by the BA MB program will not only increase enrollment but will also result in greater student retention rates. UHM also is continuing its efforts to establish seamless articulation pathways for this program with the community colleges.

Chair Wilson asked for examples of the types of diverse career options that would be available to students upon completion of the BA MB degree program. Provost Bruno replied that BA MB graduates will have a broad set of skills applicable to diverse professional options including careers in teaching, sustainability, conservation, management, and community outreach. A BA MB degree can also serve as a pathway to other careers including those in the medical field.

Noting the current existence of a BS MB program, Chair Wilson inquired as to whether overall enrollment in marine biology programs is expected to increase despite the addition of the BA MB program. Provost Bruno responded that a large number of students have expressed interest in pursuing a marine biology degree that involves less scientific rigor, is more user friendly, and provides broad career options. As such, UHM expects to see an increase in enrollment and degrees awarded in marine biology.

Citing data provided in the packet of materials that appears to contradict UHM's expectations, Regent Acoba requested clarification on enrollment in the BA MB program. Provost Bruno replied that while UHM does expect the BA MB program to siphon off some students from the BS MB program, it believes that many of these students may have underestimated the rigorous scientific expectations of the BS MB program and would have dropped out of the marine biology program altogether. Creation of the BA MB program will more than likely result in the retention of those individuals. Additionally, the BA MB program is expected to attract a significant number of new students over time given the interest expressed in the program to date. Hence,

UHM expects that there will be an enrollment increase as well as a net increase in degrees earned in these two combined degree programs.

Regent Acoba inquired as to whether the establishment of the BA MB program would result in increased transfers to UHM from the community colleges. Provost Bruno responded in the affirmative stating that the BA MB program is much better suited for articulation pathways from the community colleges and reiterated that UHM intends to continue to work on establishing and promoting these pathways.

Referencing the current existence of a Bachelor of Arts in Marine Sciences (BA MS) at UHH, Regent Acoba questioned the need for establishing a BA MB program at UHM. Chancellor Irwin stated that, while a BA MS program currently exists at UHH, this program is substantially different from the BA MB program in that it offers a much broader degree without a focus on marine biology and the two programs do not overlap.

Regent Acoba moved to recommend board approval of the establishment of a provisional BA MB program at UHM, seconded by Vice-Chair Acopan, and noting the excused absence of Regent Bal, the motion carried with all members present voting in the affirmative.

b. Change from Provisional To Established Status: Bachelor of Science in Molecular Cell Biology (MCB BS)

Provost Bruno provided an overview of the request to change MCB BS program from provisional to established status. He also expounded on some of the reasons for the delay in moving forward with this request, including the major reorganization of the College of Natural Sciences (CNS) in 2019. UHM anticipates that the popularity of, and enrollment in, this program will increase because of the heightened interest in this field of study due to the COVID-19 pandemic. The MCB BS program has proven to be extremely successful throughout its existence as a provisional program with an average cohort of 65 students per year, an 80 percent retention rate - the highest among all programs in the life sciences, and a 95 percent completion rate within five years.

Noting that the plan to provisionally establish the BA MB program was authorized in 2019 and that the MCB BS program was given provisional status in 2011, Regent Acoba inquired about the reasons for the administration's delay in bringing these types of requests before the board. Provost Bruno stated that the administration performs a thorough analysis of programs requesting provisional or established status which at times requires that additional information be gathered and may cause delays in bringing these efforts before the board. Dr. April Quinn, Director of Program Development and Review at UHM, added that the forms used to request provisional or established status were revamped and some programs were required to resubmit paperwork despite completion of the original forms in a timely manner. Additionally, required reviews by the UHM Faculty Senate experienced interruptions due to time constraints which also contributed to delays in submitting this particular request.

Citing data showing a decline in MCB BS enrollment figures in 2018, Regent Acoba asked whether the cause of this decrease was understood. Dr. Howard Shen, a

Molecular Biology Instructor with the School of Life Sciences (SOLS), replied that the drop-off experienced in 2018 and thereafter was largely due to the way in which students are exposed to the program. Most students enrolled in life sciences programs become aware of the MCB BS program upon meeting with academic advisors during their second year at UHM. In 2018, CNS, which encompasses SOLS, experienced a shortage of academic advisors. This decrease in academic advising caused a decline in the number of students being made aware of the program and ultimately resulted in decreased enrollment. However, he stated that CNS is addressing this staffing shortage and fully expects enrollment in the MCB BS program to return to its initial trajectory in the next year or two. He also stated that initiatives are being undertaken to increase awareness of the MCB BS program among first and second-year students which should help to increase enrollment.

Regent Acoba asked if there were instances of other programs experiencing declines in enrollment due to staffing issues with academic advising. Dr. Shen stated that he could only speak to what is being experienced by the MCB BS program and was unaware of other programs experiencing this issue.

Chair Wilson asked whether there has been an increase in demand for individuals with a background in molecular cell biology in general. Dr. Shen responded in the affirmative noting the increased interest in immunology, biomedical design, and biomedical research spurred on by the COVID-19 pandemic. Chair Wilson remarked that, besides the medical aspects of this degree, he is also aware of interest in this field with respect to its application to the food industry and food security.

Regent Haning moved to recommend board approval to change the MCB BS program at UHM from provisional to established status, seconded by Vice-Chair Acopan, and noting the excused absence of Regent Bal, the motion carried with all members present voting in the affirmative.

c. Change from Provisional to Established Status: Bachelor of Environmental Design (BEnvD)

Provost Bruno provided an overview of the request to change the BEnvD degree program from provisional to established status. The BEnvD program was given provisional status in spring 2014 and serves as a pre-professional undergraduate degree, either as a terminal degree to enter the work force or as the foundation for graduate study in any number of fields, notably architecture, planning, landscape architecture, or construction management. The career flexibility provided by this program makes it a popular course of study among undergraduate students which is underscored by its current enrollment of 218 students. The BEnvD program also has a well-established articulation agreement with the architectural drafting program at Honolulu Community College (HonCC), which adds to its popularity.

Regent Acoba asked about the development of BEnvD curriculums at the community colleges to facilitate the transfer of students to UHM as well as the number of community college students transferring into the BEnvD program; the reasons for the establishment of a 2+2 articulation pathway with Hoa Sen University in Vietnam and

whether such agreements have been sought with other foreign universities; and the meaning of the reference to funds awarded by formula and tradition in reference to income for the School of Architecture (SOA). Dr. William Chapman, Interim Dean of SOA, responded that SOA is working with the community colleges, in particular HonCC and Hawai'i Community College, to develop curriculums for the easier transfer of students into the BEnvD program. However, while the BEnvD program itself is a broad and general degree in design studies, it consists of a sequence of rigorous design studios which is making the development of articulation pathways challenging. With respect to the articulation agreement with Hoa Sen University, this initiative was faculty driven by individuals with connections to both SOA and Hoa Sen University. Finally, Dr. Chapman relayed that, due to the complexity of the integration of the BEnvD program, SOA needed to develop a formula that reflected income and costs as accurately as possible and that was the formula referenced in the statement mentioned.

Referencing comments alluding to the BEnvD program curriculum being future-focused, Chair Wilson asked for an example of the program curriculum's attention to future demands in this field. Dr. Chapman replied that the BEnvD course of study has several labs and programs that work with state and local government agencies, as well as a number of groups in the building professions, to assess and address future environmental impacts, such as climate change, on architectural design needs in both Hawai'i and the Pacific-Asia region.

Regent Haning moved to recommend board approval to change the BEnvD program at UHM from provisional to established status, seconded by Vice-Chair Acopan, and noting the excused absence of Regent Bal, the motion carried with all members present voting in the affirmative.

d. Establishment of a Provisional Bachelor of Education in Special Education (Bed SPED)

Provost Bruno provided an overview of the request to establish a provisional BEd SPED program stating that this program is intended to fill a gap in avenues for teacher licensure by creating an undergraduate option for licensure tracks in the areas of Mild/Moderate Disabilities Secondary Education and Severe Disabilities/Autism PreK-12. He noted that licensure in these areas is only available through post-baccalaureate or Master of Education programs and that neither of these specialized instructional areas are currently available anywhere in the university system. Providing this new opportunity for licensure is critical because there is a chronic and persistent shortage of licensed SPED teachers throughout the United States, including the Hawaii Department of Education (DOE). While the BEd SPED program is full-time, courses will be offered during after school hours and online to make the program as user friendly for working professional students as possible. Students will also be provided with an option to receive a stipend from the DOE to cover the cost for 60 of the 63 credits required for graduation in return for agreeing to teach in SPED at a DOE school for three years upon degree completion.

Regent Acoba agreed with the importance of the BEd SPED program but questioned the delay in establishing this program given the exigency of the situation. Nathan

Murata, Dean of the College of Education, replied that part of the delay in implementing this program was due to resource challenges faced by the college with respect to ensuring the adequacy and statewide availability of specialized courses to meet relevant national standards in SPED. Development of a nouveau approach that allowed for students to be admitted into the BEd SPED program without first having subject or content area certification also added to the delay.

Regent Haning asked whether a sufficient desire existed to enter the SPED field of study given the demanding nature of the profession. Professor Jenny Wells from the College of Education replied that the recruitment specialist within the SPED Department at UHM has received over 92 unsolicited requests for information on the availability of a BEd SPED degree program over the past five or six years which indicates a substantial interest in this field of study.

Vice-Chair Acopan was encouraged by the online and after school course options being offered by the BEd SPED program and praised UHM for its efforts in expanding complete degree online course offerings.

Vice-Chair Acopan moved to recommend board approval of the establishment of a provisional BEd SPED program at UHM, seconded by Regent Acoba, and noting the excused absence of Regent Bal, the motion carried with all members present voting in the affirmative.

2. Review and Recommend Board Approval to Change from Provisional to Established Status: Advanced Professional Certificate in Special Education PK-12 (APC SPED), LeeCC

Chancellor Peñaloza provided an overview of the request to change the APC SPED program at LeeCC from provisional to established status stating that the program was developed in response to a request by the Hawai'i Teacher Standards Board to increase pathways leading to SPED licensure in an effort to address the critical need for SPED-licensed instructors. He stated that the program focuses on individuals who are currently employed in a school setting as substitute teachers, emergency hire teachers, or educational assistants and is the State's first and only multi-track, self-paced, and fully online program option with a 100 percent tuition stipend provided through the DOE. Enrollment in the APC SPED program has exceeded expectations and resulted in the licensure of over 100 SPED teachers to date.

Board Chair Moore expressed his delight in the success of these programs and conveyed his appreciation to both UHM and LeeCC for rising to the challenge to address the need for SPED teachers in Hawai'i.

Vice-Chair Acopan moved to recommend board approval to change the APC SPED program from provisional to established status, seconded by Regent Haning, and noting the excused absence of Regent Bal, the motion carried with all members present voting in the affirmative.

Chair Wilson thanked the administration for their efforts in developing programs that meet the need for high demand areas. He encouraged the administration to display a greater sense of urgency and act with expediency in moving programs forward.

B. Recommend Board Approval of Revisions to Regents Policy (RP) 6.208, Board Exemptions to Non-Resident Tuition

President Lassner stated that the revisions to RP 6.208 were non-substantive and mainly housekeeping in nature. He introduced Hae Okimoto, Associate Vice President (AVP) for Student Affairs, who would provide the report on this agenda item.

AVP Okimoto discussed the proposed update to RP 6.208 with respect to exemptions to non-resident tuition as it relates to veterans, Pacific Island students, students participating in national and international exchange programs, and graduate assistants. She stated that some of these modifications were necessitated by changes to federal policy, especially around the educational benefits for the military connected community, while others were being offered to better align the policy with current university practice. The administration requested a clarifying amendment to address additional situations regarding tuition exemptions for visiting students in the university's national and international exchange programs.

Regent Acoba moved to recommend board approval of the amendments to RP 6.208 with inclusion of the additional requested amendment, seconded by Regent Haning, and noting the excused absence of Regent Bal, the motion carried with all members present voting in the affirmative.

C. Hawai'i P-20 Partnerships for Education (Hawai'i P-20) Update

Stephen Schatz, Executive Director of Hawai'i P-20 and State Director for Career and Technical Education, provided background information on Hawai'i P-20, reviewing its mission, role in development of educational policy, and goals. He also reviewed the processes used to create educational pathways that align with college and career outcomes, discussed various strategies being used to promote collaboration and integration with respect to educational pathways to ensure success, and provided an example of an existing educational pathway that leads from a student's senior year in high school through post-high school employment.

Referencing the data sharing agreements mentioned in the materials provided, Regent Acoba asked if Hawai'i P-20 has the ability to perform data comparisons with other countries or states, or smaller areas such as counties and districts. Executive Director Schatz replied that some data comparisons can be done, particularly regionally in Hawai'i, and mentioned the College and Career Readiness Indicator Report, which can be used to compare various high school data metrics related to student performance and post-high school activity. Hawai'i P-20 has not done comparative analyses outside of Hawai'i, except for broad comparisons such as those involving data related to the Free Application for Federal Student Aid (FAFSA).

Regent Acoba asked how the 25 high schools taking part in a shared, online, early college course program were chosen. Executive Director Schatz stated that the high schools chosen to participate in this program for the current semester were selected based upon their status as an academy in the DOE. Regent Acoba asked for clarification on what constituted a DOE academy. Executive Director Schatz stated that high schools designated as DOE academies have organized themselves to provide specialized classes and training in a particular field such as construction or healthcare.

Regent Acoba questioned if there has been an increase in students applying for FAFSA. Executive Director Schatz responded that the FAFSA trend was on an upward trajectory until the start of the COVID-19 pandemic which impacted the number of individuals seeking a post-secondary education, thus decreasing FAFSA applicants.

Noting Hawai'i P-20's work-based learning website, Regent Acoba asked if monitoring the use of this site by schools, colleges, or employers was possible. Executive Director Schatz replied that he was unsure of how usage of this website could be monitored but could provide more information to regents at a later date.

D. General Education (Gen Ed) Redesign Update

Debora Halbert, AVP for Academic Programs and Policy, provided an update on the efforts to examine and revamp the GenEd curriculum stating that the draft GenEd curriculum redesign proposal has been undergoing formal consultation and highlighted a number of activities that have engaged and solicited feedback from the general university community. She outlined the schedule for further revisions, consultation, and development of an implementation plan, and noted that a formal vote is anticipated to occur in spring 2023.

V. ADJOURNMENT

There being no further business, Chair Wilson adjourned the meeting at 11:46 a.m.

Respectfully Submitted,

Kendra T. Oishi
Executive Administrator and Secretary
of the Board of Regents



UNIVERSITY of HAWAI'I MĀNOA

DTS 22395

College of Tropical Agriculture and Human Resources Founding College of the University of Hawai'i Office of the Dean and Director for Research and Cooperative Extension

UNIVERSITY OF HAWAII BOARD OF REGENTS

'22 APR 27 A9:20

March 14, 2022

MEMORANDUM

TO: Randolph G. Moore Chair, Board of Regents

VIA: Ernest Wilson Chair, BOR Committee on Academic and Student Affairs

VIA: David Lassner President [Signature]

VIA: Debora Halbert Vice President for Academic Strategy, UH System [Signature]

VIA: Michael Bruno Provost [Signature] for Michael Bruno

VIA: Laura Lyons Interim Vice Provost for Academic Excellence [Signature]

VIA: Krystyna Aune Dean, Graduate Division [Signature] Digitally signed by Krystyna S. Aune Date: 2022.03.15 09:55:13 -1000

FROM: Nicholas Comerford Dean and Director, College of Tropical Agriculture and Human Resources [Signature] Digitally signed by Nicholas Comerford Date: 2022.03.14 14:14:31 -1000

SUBJECT: REQUEST FOR ESTABLISHED STATUS FOR THE PHD PROGRAM IN NUTRITIONAL SCIENCES AT THE UNIVERSITY OF HAWAI'I AT MĀNOA

SPECIFIC ACTION REQUESTED:

It is respectfully requested that the Board of Regents grant established status to the PhD in Nutritional Sciences in the College of Tropical Agriculture and Human Resources at the University of Hawai'i at Mānoa.

RECOMMENDED EFFECTIVE DATE:

Effective upon approval.

ADDITIONAL COST:

No additional cost.

BACKGROUND:

The Nutritional Sciences PhD program is an interdisciplinary program, across campus, reflecting the interdisciplinary multifaceted topic of nutritional sciences. The PhD in Nutritional Sciences addresses a shortage of nutrition professionals in Hawai'i and the Pacific region. Nutrition-related diseases (obesity, diabetes, heart disease, cancer) are the most significant health problems in Hawai'i and the Pacific Region, and indeed the world. Study in Hawai'i allows the examination of exciting and vital interdisciplinary nutrition topics. We have added tracks in human nutrition, animal nutrition, and food science, that provides a strong pipeline. The field includes tropical foods and aquaculture, island food systems and indigenous nutrition. As a Research 1 university, with unique human, cultural, and natural diversity in food and nutrition practices and environment, lifestyle and health, the research opportunities are vast.

While nutrition, food science and animal science are key feeder degrees into Nutritional Sciences, other degrees such as public health, epidemiology, medicine, exercise science, and biology also provide backgrounds suitable for pursuing a PhD in nutritional sciences. The program has graduated 11 students since its inception, with a steady increase in rate of graduation (until the pandemic); 25 students are currently enrolled. Students are ethnically diverse, a quarter Native Hawaiian, and graduates are working in important positions in Hawai'i, the Pacific and the US Mainland.

The Nutrition program diversified its pipeline of students into the PhD program, including all three graduate programs in HNFAS (Nutritional Sciences, Animal Science, and Food Science). Furthermore, owing to changes in the field of nutrition and dietetics, a master's-level dietetics internship program will soon be required in order for graduates to obtain the dietetics credential. The MS Dietetic Credentialing program was initiated in HNFAS this Fall (2021) with 3 MS students in Nutritional Sciences. This change also has increased the demand for PhD-level faculty to train master's students, and it is anticipated that 2 additional students per year will enter the PhD program from the upcoming revised MS program. We have a large pipeline of 293 undergraduate students in the HNFAS Department, in Food Science and Human Nutrition (98), Dietetics (31), and Animal Science (164).

We have fostered collaboration and growth by working with faculty in research units to increase engagement in teaching and mentoring through shared seminars. We have increased the membership of graduate faculty who are actively acquiring competitive grants and who are engaged in important nutrition-related research in areas such as obesity and food sustainability.

In the last 3-year period, our Nutritional Sciences faculty brought over \$63 million dollars into the university, providing a setting for research, and providing student research assistantships. Student funding is primarily in the form of graduate assistantships, funded through faculty research activity and college teaching assistantships. With added research-active graduate faculty, the department has increased the amount of support available, which in turn has increased the program's visibility and enrollment.

Our program strengthens the University's mission as a Native Hawaiian place of learning. We also serve the Pacific region. We have had 2 Native Hawaiian, 3 Chamorro, 3 Filipino and 1 Samoan PhD students to date. Our faculty address Native Hawaiian nutrition and the Pacific Island context for nutrition. Two of our faculty are Native Hawaiian and one is Filipino. The COVID pandemic has delayed expected graduations in 2020 and 2021, though they are continuing to progress, albeit at a slowed pace. Human contact is required for much of the research, which was impacted by the COVID pandemic.

The need for nutrition professionals (i.e. job growth) is increasing due to need for strengthening the food system and for disease prevention in all sectors of business and society to improve quality of life. This will be evident in the food industry to improve the development and marketing of foods, and throughout the economy to control healthcare costs in both the public and private sectors, and to improve quality of life. This will be true not only in the USA, Hawai'i, and the Pacific region, but worldwide.

ACTION RECOMMENDED:

It is respectfully recommended that the Board of Regents grant established status to the PhD in Nutritional Sciences in the College of Tropical Agriculture and Human Resources at the University of Hawai'i at Mānoa.

Attachment: Proposal for PhD in Nutritional Sciences in the College of Tropical Agriculture and Human Resources at the University of Hawai'i at Mānoa, [Establishment of PhD degree in Nutrition \(original name; approved 11-9-2007\)](#)

c: Executive Administrator and Secretary of the Board Kendra Oishi

Provisional to Established Programs

1. Executive Summary

Enrollment in the Nutritional Sciences PhD program (the Program) has increased dramatically in the last few years. Notably a quarter are Native Hawaiian. Nutritional Sciences (code 30.1901), provides Science, Technology, Engineering, Agriculture, and Medicine (STEAM) training that “focuses on the utilization of food for human growth and metabolism, in both normal and dysfunctional states, from the interdisciplinary perspective of the agricultural, human, biological, and biomedical sciences. Includes instruction in food science, biochemistry, physiology, dietetics, food and nutrition studies, biotechnology, biophysics, and the clinical sciences.” The Program highlights foods and nutrition of Hawai‘i, Asia and the Pacific. The Program, is based in HNFAS/CTAHR, and integrates existing faculty teaching, research and outreach faculty and programs from units across campus, each contributing areas of strength to the interdisciplinary field of Nutritional Sciences. Nutritional Sciences is vital to the needs of the state, to improve food systems and availability of healthy food, to provide nutrition security and health to residents of Hawai‘i. The program currently has 25 PhD students enrolled, and has graduated 11 PhD students (the first in 2013, prior to this reporting period which is since 2015).

2. Alignment of program with mission and strategic planning of the Campus and University System

The Nutritional Sciences PhD program is based in CTAHR, yet has an active complementary relationship with several other units relevant to nutrition, including the UH Cancer Center, JABSOM, SOEST, and Public Health. Nutrition is a broad field ranging from physiology to food and agriculture, to public health promotion. Each participating unit provides research settings for our diverse student body and newly develop tracks (animal science, food science, human nutrition), while enabling research diversity and productivity. For example, UH Cancer Center, has substantial research opportunity and graduate assistantships, but no academic program, creating a synergistic relationship where HNFAS provides coursework and students and Cancer Center provides research diversity and funding (including assistantships). JABSOM provides clinical settings not found in an agricultural setting like CTAHR, and Public Health links us to community public health nutrition programs for broad impact. These partnerships provide rich opportunities for faculty to meet their assigned duties (teaching, research, and extension), and for students to gain valuable research and practical experience, strengthening each program. Directed Reading and Research credits with each of these academic units also bring tuition dollars into the university.

The Program strengthens the University’s mission as a Native Hawaiian place of learning. We also serve the broader Pacific region. We have graduated 3 Native Hawaiian, 3 Chamorro, 3 Filipino, 1 Samoan, and 8 South Asian. Our graduate faculty address Native Hawaiian nutrition and the Pacific Island context of nutrition. Two Program graduate faculty are Native Hawaiian, and one is Filipino.

The need for nutrition professionals (i.e. job growth) is increasing due to need for food system strengthening, health promotion and disease prevention in all sectors of business and society to improve quality of life. This is evident in agriculture and aquaculture, the food industry to improve the development and marketing of foods, and throughout the economy to control healthcare costs in both the public and private sectors, and to improve quality of life. This is true in the USA, Hawai‘i, and the Pacific region, and worldwide.

3. Program enrollment and graduation of students using anticipated and actual enrollment figures. In other words, did the program meet its proposed targets?

Our student numbers have increased dramatically in the last 5 years, owing to recruitment of 12 new research active graduate faculty from across the university, and to modifications to the curriculum to provide additional tracks (animal sciences, food sciences and human nutrition). However, due to COVID 19 in the last couple of years, graduation rates have not kept pace with the increased enrollment, as many students have had to make modifications to their research plans, especially those working with human participants, delaying their graduation. Students are progressing, though many are taking longer than would otherwise have been the case. The 3 HNFAS MS programs feed into the Nutritional Science PhD program. Over time, we have increased the PhD enrollment to over 20 while maintaining MS student at about 25 across in the MS programs.

Table 1. Enrollment in Nutritional Sciences Graduate Programs by Year

	2015	2016	2017	2018	2019	2020	2021
Projected Enrollment	10 PhD	11PhD	12PhD	12PhD	12PhD	12 PhD	12 PhD
Actual Enrollment	11PhD; 22 MS	19PhD; 25 MS	11PhD; 31 MS	15PhD; 29 MS	19PhD; 28 MS	22PhD; 28 MS	23PhD; 22 MS

Program completion was growing, prior to COVID 19, but has not kept pace since COVID 19, which has interfered with academic activities and, especially research activities that involve human participants.

Table 2. Nutritional Sciences PhD Program Completion by Year

	2015	2016	2017	2018	2019	2020	2021
Projected Program Completion (annual)	2	2	2	2	2	3	3
Actual Program Completion (annual)	2	1	1	2	2	1	1

4. The instructional resources required for the program and how they were utilized compared with anticipated resources.

PhD Nutritional Sciences program faculty members based in the HNFAS academic home of the PhD program include: Jinan Banna, Monica Esquivel, Rajesh Jha, Soojin Jun, Yong Li, Birendra Mishra, Rachel Novotny, Jenee Odani, Marie Fialkowski-Revilla, Andre Seale, Yong Li, and Jinzeng Yang. These faculty conduct the majority of teaching for the Program, although doctoral advisors are found among the Graduate faculty in partnering units.

In addition to increasing membership in the Nutritional Sciences Graduate faculty among research active faculty across campus, we also fostered collaboration with faculty to increase engagement in teaching and mentoring through shared seminars. This made use of faculty resources that are already employed and actively acquiring competitive grants in important nutrition-related research in areas such as obesity and food sustainability.

Some examples of HNFAS Nutritional Sciences Graduate faculty research that highlight the contribution to the University of a place of Native Hawaiian learning are:

- Andre Seale- Hawai‘i -Pacific aquaculture revitalization and expansion
- Rajesh Jha- Leveraging established research plantings of breadfruit to understand drivers of fruit quality and its impacts on post-harvest
- Monica Esquivel- Innovating Clinical Nutrition Instruction for the Pacific

- Rachel Novotny- Resiliency in Food Systems for Children’s Healthy Living (CHL Food systems)-A Center of Excellence
- Marie Revilla- Healthy Living through Ai Pono in Hawaiian Communities

Some examples of the Nutritional Sciences collaborations with other units that also contribute to the University as a place of Native Hawaiian learning are:

- Pratibha Nerurkar- Empowering women and underrepresented undergraduates with advanced technology research training in agriculture and food sciences
- Cheryl Albright - Cluster Randomized Trial of a Mobile Health Intervention to Achieve Appropriate Gestational Weight Gain in Overweight/Obese Women
- May Okihiro- Hawai‘i Initiative for childhood obesity research and education
- Kristi West- Hawai‘i and Mariana Islands Stranding Analysis and Reports
- Lynne Wilkens- Understanding Ethnic Differences in Cancer: The Multiethnic Cohort Study
- Gertraud Maskarinec- Pacific Island Partnership for Health Equity
- Loic LeMarchand- Understanding the Determinants of Racial/Ethnic Disparities in Liver Cancer and Chronic Liver Disease in understudied and high-risk populations

Nutritional Sciences graduate faculty bring in about \$20 million dollars of competitive grants into the University, per year, providing a rich setting for research, and providing student research assistantships for graduate students. A full list of the Program’s faculty organized by home unit and department and showing the diverse research areas are detailed in Appendix A

Instructional Resources (Table 4) were calculated using the University MIRO system data for the HNFAS Department, and thus reflect all HNFAS graduate programs (MS Animal Science, MS Food Science, MS Nutritional Sciences and PhD Nutritional Sciences). Grant resources were derived from the University Office of Research Services and include all grants found for the Nutritional Sciences PhD Graduate faculty.

Table 4. Program Instructional Resources

Instructional Resources	Year 1 2015	Year 2 2016	Year 3 2017	Year 4 2018	Year 5 2019	Year 6 2020	Current Year 2021
Combined Tuition/Summer /Course Fees*	PhD 35,170	PhD 252,096	PhD 383,880	PhD 529,752	PhD 603,960	PhD 617,280	PhD 765,024
Other Allocation (Grants) among Graduate Faculty**	20,269,715	14,825,827	15,274,768	13,368,508	17,674,730	16,547,272	21,219,778

* all HNFAS/CTAHR courses, MIRO

** all Nutritional Sciences graduate faculty, ORS

Table 5. Program Faculty

Personnel	Year 1 2015	Year 2 2016	Year 3 2017	Year 4 2018	Year 5 2019	Year 6 2020	Current Year 2021
Projected Tenured Faculty	5 HNFAS	5 HNFAS	5 HNFAS	5 HNFAS	5 HNFAS	5 HNFAS	5 HNFAS
Actual Tenured Faculty	12 HNFAS	12 HNFAS	12 HNFAS	12 HNFAS	12 HNFAS	12 HNFAS	12 HNFAS

The Program projected an APT to be the only cost, and has been working with 0.25 FTE of an APT (Table 6).

Table 6. Operating Costs

	Year 1 2015	Year 2 2016	Year 3 2017	Year 4 2018	Year 5 2019	Year 6 2020	Current Year 2021
Projected Operating Costs (from Provisional proposal, 1APT)	\$47,845	49,759	51,749	53,819	55,972	58,211	60,539
Actual Operating Costs, 0.25 APT)	0	2,581	4,808	14,470	14,835	15,025	19,951

5. How the program is organized to meet its outcomes

The Nutrition program diversified its pipeline of students, including tracks from all three Master's programs in HNFAS (Nutritional Sciences, Animal Science, and Food Science), where the program is administratively housed. Furthermore, owing to changes in the field of nutrition and dietetics, a master's-level dietetics internship program has been initiated and will soon be required in order for graduates to obtain the dietetics credential. The MS Dietetic Credentialing program was initiated in HNFAS in Fall 2021 with 3 MS students in Nutritional Sciences. This change also has increased the demand for PhD-level faculty to train master's students, and it is anticipated that 2 additional students per year will enter the PhD program from the revised MS program. We currently have a pipeline of 293 undergraduate students in the HNFAS Department, in Food Science and Human Nutrition (98), Dietetics (31), and Animal Science (164).

Table 7 shows data on courses and reflect HNFAS' 4 graduate programs, although the Program also benefits from SSH from graduate faculty based in other units who predominantly contribute directed reading and research SSH. The 3 HNFAS MS degrees are important feeders into the Nutritional Sciences PhD program. We are now surpassing projected 240 SSH in HNFAS graduate courses, at 310 SSH/year.

Table 7. HNFAS Dept. Graduate Courses and Student Semester Hours (SSH)

	2015	2016	2017	2018	2019	2020	2021
Projected No. Courses	Not available	Not available	Not available	Not available	Not available	Not available	
No. Actual Courses Offered	5	6	6	6	7	8	8
Projected No. Sections	Not available	Not available	Not available	Not available	Not available	Not available	Not available
No. Actual Sections Offered	5	6	6	6	7	8	8
Projected Annual SSH	200	220	240	240	240	240	240
Annual SSH	169	190	222	190	237	254	310

6. Evidence of student learning and student and program success.

Graduates of the Nutritional Sciences PhD program are employed in important and diverse aspects of nutrition. Below are the positions held by the 11 graduates of the Program.

- Postdoctoral positions at University of Georgia and Pennington Biomedical Research Center, Louisiana (2)
- Dietetic internship at University of Illinois (1)
- Dietitian in the Army (1)
- Nutritional Epidemiologist at the Centers for Disease Control, Atlanta (1)
- Assistant Professors at UHM (1) and University of Nevada, Reno (1)
- Associate Professor at University of Guam (1)
- Animal Nutrition for a Global Company (1)
- Lecturing at UHM (2)

We conducted several surveys of students regarding their experience in the Program. A survey of 3 graduates from Oct 2018 to 2020, showed that all went to postdoctoral positions. They spent 4 years in Nutritional Sciences PhD program, on average. Their GPA was 3.92, on average. The students published 6.7 papers, on average (5.3 as first author), gave 4 presentations, on average, and received 4 awards, on average.

There were 11 responses to a student survey of achievement of student learning outcomes (SLO's) in 2018 (n=4), and in 2019 (n=7). Overall, the average score was 3.42 out of 5 (min 2.6 [SLO #5], max. 4.0 [SLO # 7]).

- 2018 Average score 3.46 (min 2.5 [SLO #5], max. 4.0 [SLO # 3])
- 2019 Average score 3.40 (min 2.7 [SLO #5], max. 4.1 [SLO # 7])

Students felt least prepared in grant writing (SLO 5) and most prepared in research dissemination skills (SLO 7). Since that time, more students are taking a Grant Writing course offered in the CTAHR. To the question, Do you feel you receive(d) enough instruction, guidance, and constructive development from your immediate department faculty, including your committee members and PI, to achieve the program SLOs?, the

overall average was 3.91 out of 5.

- 2018 average: 3.25
- 2019 average: 4.28

We use rubrics (4-point scale, 1 is low and 4 is high) at each graduate examination for faculty to assess student progress. Results are as follows:

Pre-Candidacy Qualifying Exam (Form 1)

- 14 students were assessed from Oct. 2018 to 2022
- 13 out of 14 students passed
- Average total score: 3.12 out of 4 (min 2.58, max 3.5)

Comprehensive Exam & Dissertation Proposal (Form 2)

- 7 students were assessed from Oct. 2018 to 2021
- All students passed
- Average total score: 3.3 out of 4 (min 3.0, max 3.83)

Dissertation Defense (Form 4)

- 4 students were assessed from Oct. 2018 to 2020
- All 4 students passed; 1 student exceeded
- Average total score: 3.50 out of 4 (3, 3.86)

Conclusion

The Nutritional Sciences PhD program has been performing very well, and is growing exponentially. The program helps the University address its mission to serve Native Hawaiians and the Pacific region, with food of Hawai‘i and the Pacific region providing an important and understudied niche. More individuals with PhD training in Nutritional Sciences are needed in Hawai‘i, the region and world, to prevent disease and to enhance health and wellbeing.

Appendix A. Nutritional Sciences Program Faculty by Unit and Research Area

Name	Home Unit/Dept	Research Area
Hetzler, Ronald	COE/KRS	Exercise metabolism, fitness, testing body composition
Latner, Janet D	CSS/Psychology	Obesity and eating disorders; methods of relieving the significant disability, stigma, and impairment associated with these conditions
Banna, Jinan	CTAHR/HNFAS	Nutrition education, program evaluation, community nutrition, child and adolescent nutrition
Butel, Jean	CTAHR/HNFAS	Public health nutrition programs
Esquivel, Monica	CTAHR/HNFAS	Community nutrition, Dietetics
He, Yanghua	CTAHR/HNFAS	Livestock animal production: genomics and epigenomics; Nutrigenomics: studying the mechanisms of how different diets contribute to different phenotypes (e.g. BMI for evaluating obesity) based on omics-data.
Ho, Kacie	CTAHR/HNFAS	Bioactive compounds, bioavailability, food structuring, colloids for nutrient and bioactive stabilization or delivery

Jha, Rajesh	CTAHR/HNFAS	Animal nutrition, feed evaluation, carbohydrate metabolism, fiber fermentation, gut physiology and health, in vitro digestion and fermentation
Jun, Soojin	CTAHR/HNFAS	Emerging food processing and packaging technologies, food nanotechnologies, and biosensors
Kim, Yong-Soo	CTAHR/HNFAS	Methods of improving animal growth performance and carcass composition based on our current understanding of the molecular mechanisms of action of growth regulation. Myostatin, as a potent negative regulator of skeletal muscle growth.
Lee, Mi-Jeong	CTAHR/HNFAS	Nutritional biochemistry, fatty acid metabolism
Li, Yong	CTAHR/HNFAS	Food microbiology, food safety, applied statistics
Mishra, Birendra	CTAHR/HNFAS	Effects of nutrition on the reproductive paradigms such as growth and development, mitigating the environmental stress, and also formulating to protect the hazards of radiotherapy for cancer treatment, and space mission for astronauts
Novotny, Rachel	CTAHR/HNFAS	Nutritional epidemiology, global nutrition, breast feeding and child growth, Children's Healthy Living Program and Center of Excellence
Odani, Jenee	CTAHR/HNFAS	Diseases of terrestrial animals & aquatic livestock; veterinary anatomic pathology including disease pathogenesis, disease diagnostic techniques, histology and histopathology
Revilla, Marie	CTAHR/HNFAS	Nutrition and health in indigenous populations, nutritional assessment, nutrition education for underserved populations
Seale, Andre	CTAHR/HNFAS	Aquaculture and biomedical research, especially: 1) osmoreception, 2) osmoregulation and 3) environmental adaptation and growth in fish: endocrine and specialized cellular responses to changing environmental conditions
Thorne, Mark	CTAHR/HNFAS	1) effects of climate change on range and livestock production in Hawai'i and development management strategies that build resiliency and long-term sustainability; 2) Hawai'i's rangelands and remediation of former sugar and pineapple lands for sustainable livestock production; 3) Integrated Pest Management strategies on Hawai'i rangelands affected by invasive weeds, insects and diseases; 4) ecology of tropical range and pasture communities under different grazing management

		strategies; and 5) grazing animal behavior and nutrition on tropical rangelands.
Yang, Jinzeng	CTAHR/HNFAS	Skeletal muscle growth, obesity, diabetes prevention and epigenetic priming of the metabolic syndrome
Zaleski, Halina M.	CTAHR/HNFAS	Swine production management including artificial insemination, livestock waste management
Li, Qingxiao	CTAHR/MBBE	Proteomics, environmental biochemistry and biotechnology
Nerurkar, Pratibha	CTAHR/MBBE	Traditional Hawaiian and Ayurvedic medicine, alternative medicines in obesity, insulin resistance and hyperlipidemia, insulin signaling, lipid and glucose metabolism
Jenkins, Daniel	CTAHR/MBBE	developing molecular interactions and handheld instrumentation to enable simple agricultural diagnostics in the field.
Fox, Kealoha	JABSOM	Triangulate strategies of program innovation, best-practice research, regulatory management, and clinical practice that strengthen a healthier Hawai'i, reduce minority inequities, and improve the longevity of wellness for all people in the twenty-first century.
Okiihiro, May	JABSOM	Childhood obesity and early metabolic risk among children in Hawai'i, development of obesity and ways to address the issue from clinical and community perspectives.
Antonio, Mapuana	OPHS	Native Hawaiian nutrition and health
West, Kristi	SONDH/NURSING	Nutrition and Wellbeing of Marine Mammals
Albright, Cheryl Lynn	UHCC	Physical Activity, energy balance, body fat distribution in ethnic minorities, eHealth interventions
Boushey, Carol J	UHCC	Nutritional epidemiology, dietary assessment, interventions, biomarkers of dietary intake
Franke, Adrian A H	UHCC	Development of biomarkers reflecting exposure to vegetarian foods, pharmacokinetics of chemopreventive micronutrients, development of state-of-the-art analytical techniques to determine metabolites in biological matrices
Le Marchand, Loic	UHCC	Interactions between genetic and lifestyle factors responsible for the cancer risk differences that exist among ethnic/racial groups in Hawai'i and California, with the goal of advancing our understanding of the causes, mechanisms and prevention of cancer
<u>Lim, Unhee</u>	UHCC	The role of nutritional, biochemical, genetic/epigenetic and gut microbial risk factors and their racial/ethnic variations in the etiology of colorectal, liver, and breast cancers and of Alzheimer's disease.

Maskarinec, Gertraud	UHCC	Preventive medicine and nutritional epidemiology, etiology of breast cancer, Non-Hodgkin Lymphoma (NHL), and type 2 diabetes
Shepherd, John	UHCC	Radiomics, body composition, diagnostic X-ray imaging, mammographic density, bone densitometry, dual X-ray absorptiometry (DXA), single X-ray absorptiometry (SXA), osteoporosis, breast cancer, quantitative ultrasound
Wilkens, Lynne	UHCC	Methodological research that extends statistical techniques of relevance to our research, techniques for studying disease associations when the independent variables are measured with error and ethnic/racial classification

Appendix B. Program Review Data

Data available for Program Review are taken from MIRO, which are organized by department and thus reflect all graduate programs and students in the 4 graduate programs in the department. In this section we describe some demographic characteristics of the students. As of Fall 2021 there were 45 graduate students in the 4 graduate programs in HNFAS. Table 8 shows the gender distribution, showing a tendency for more female students, though recent numbers show a more balanced distribution with 21 male and 24 female students in Fall 2021. Students are roughly one third international, one third from the US mainland and one third from Hawai‘i (Table 9). Race/ethnicity (Table 10) data for international students shows them only as international; however, data on the remaining students show a diverse and mixed race/ethnic student body with a third reporting Native Hawaiian or Other Pacific Islanders race/ethnicity. From 2012 to 12/31/2021 Nutritional Sciences PhD program 40 PhD students, 4 left and 11 graduated, and 25 are currently in the program.

Table 8. Gender distribution in HNFAS Graduate Programs

Gender (count)	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
Male	15	16	13	12	18	22	21
Female	18	30	29	32	29	29	24

Table 9. Number of Students in HNFAS Graduate Programs by Geographic Origin Grouping

Geographic Origin (count)	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
<i>Hawai'i</i>	15	17	17	16	19	22	13
Hawai'i Island	2	2	1	2	2	4	2
Kaua'i	0	0	1	0	2	2	1
O'ahu	12	14	15	14	15	15	10
<i>US Mainland</i>	11	12	8	13	14	14	16
US National/CFAS	1	0	0	0	0	0	0
<i>International</i>	6	17	17	15	14	15	16

Table 10. Race/Ethnicity of HNFAS Graduate Students (Counts)

Race/Ethnicity (counts)	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	Fall 2021
<i>Asian</i>	8	8	8	5	8	5	6
Japanese	3	3	2	0	1	0	0
Chinese	2	1	2	2	3	3	1
Filipino	2	0	0	0	1	0	3
Korean	0	1	1	0	0	0	0
Vietnamese	0	0	1	1	1	1	0
Mixed Asian	1	3	2	2	2	1	2
<i>Hispanic/Latino</i>	1	0	0	1	1	2	2
<i>Multiracial</i>	3	6	5	6	6	9	4
<i>Native Hawaiian or Other Pacific Islander</i>	8	6	6	6	6	9	7
<i>Native Hawaiian or Part-Hawn</i>	7	5	5	4	4	6	5
Samoan	1	0	0	0	0	0	0
Guamanian or Chamorro	0	1	1	1	1	2	1
Other Pacific Islander	0	0	0	1	1	1	1
<i>White</i>	7	9	6	10	12	11	10
<i>International</i>	6	17	17	15	14	15	16
Race and ethnicity unknown	0	0	0	1	0	0	0

Table 11. Race/Ethnicity of HNFAS Graduate Students (%)

Asian	24.2	17.4	19	11.4	17	9.8	13.3
Japanese	9.1	6.5	4.8	0	2.1	0	0
Chinese	6.1	2.2	4.8	4.5	6.4	5.9	2.2
Filipino	6.1	0	0	0	2.1	0	6.7
Korean	0	2.2	2.4	0	0	0	0
Vietnamese	0	0	2.4	2.3	2.1	2	0
Mixed Asian	3	6.5	4.8	4.5	4.3	2	4.4
Hispanic/Latino	3	0	0	2.3	2.1	3.9	4.4
Multiracial	9.1	13	11.9	13.6	12.8	17.6	8.9
Native Hawaiian or Other Pacific Islander	24.2	13	14.3	13.6	12.8	17.6	15.6
Native Hawaiian or Part-Hawn	21.2	10.9	11.9	9.1	8.5	11.8	11.1
Guamanian or Chamorro	0	2.2	2.4	2.3	2.1	3.9	2.2
Other Pacific Islander	0	0	0	2.3	2.1	2	2.2
White	21.2	19.6	14.3	22.7	25.5	21.6	22.2
International	18.2	37	40.5	34.1	29.8	29.4	35.6
Race and ethnicity unknown	0	0	0	2.3	0	0	0

Graduate course enrollment is show in Table 12. Taking annual SSH from Table 7 and dividing by 12. Enrollment for HNFAS graduate courses was always above 10 and is currently at 26.

Table 12. Graduate course enrollment for HNFAS Course

Year	2015	2016	2017	2018	2019	2020	2021
Annual SSH	169	190	222	190	237	254	310
Annual SSH/12	14	16	19	16	20	21	26



UNIVERSITY
of HAWAI'I
MĀNOA

UNIVERSITY OF HAWAII
BOARD OF REGENTS

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College of Natural Sciences
Office of the Dean

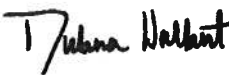
MEMORANDUM

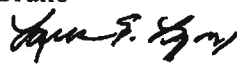
March 10, 2022

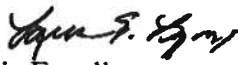
To: Randolph G. Moore
Chair, Board of Regents


VIA: Ernest Wilson
Chair, BOR Committee on Academic and Student Affairs


VIA: David Lassner
President 

VIA: Debora Halbert
Vice President for Academic Strategy, UH System 

VIA: Michael Bruno
Provost  for Michael Bruno

VIA: Laura E. Lyons
Interim Vice Provost for Academic Excellence 

From: Aloysius Helminck
Dean, College of Natural Sciences 

From: Douglas Simons
Director, Institute for Astronomy 

SUBJECT: REQUEST FOR ESTABLISHED STATUS FOR THE BACHELOR OF ARTS IN
ASTRONOMY AND THE BACHELOR OF SCIENCE IN ASTROPHYSICS AT
THE UNIVERSITY OF HAWAI'I AT MĀNOA

SPECIFIC ACTION REQUESTED:

It is respectfully requested that the Board of Regents grant established status to the BACHELOR OF ARTS IN ASTRONOMY and the BACHELOR OF SCIENCE IN ASTROPHYSICS in the COLLEGE OF NATURAL SCIENCES at the University of Hawai'i at Mānoa.

RECOMMENDED EFFECTIVE DATE:

Upon Board Approval.

ADDITIONAL COST:

None. These degree programs are taught by existing faculty at the Institute for Astronomy (IfA) and the Department of Physics and Astronomy (P&A). No new facilities or resources are required. Consequently, these programs can be offered in a cost-neutral manner.

2565 McCarthy Mall, Keller Hall Suite 201
Honolulu, Hawai'i 96822
Telephone: (808) 956-6451
Fax: (808) 956-9111
natsci.manoa.hawaii.edu

An Equal Opportunity/Affirmative Action Institution

PURPOSE:

The Bachelor of Arts in Astronomy (ASTR-BA) and the Bachelor of Science in Astrophysics (ASTP-BS) were provisionally approved on August 21, 2014. They have now completed their provisional cycle, and in accordance with Board of Regents' policy, were reviewed under the procedures for program review at UH Mānoa and recommended for established status.

BACKGROUND:

Board of Regents Policy 5.201 Parts III.B confer upon the Board the authority to grant established status to provisional degree programs, and states that a request must be made to the Board to transition a degree program from provisional to established status, and that the recommendation by the president for approval by the Board shall include the results of a program review. The results of the program review are presented in the attached document.

Summarize the program's role and its evolution since inception.

- The ASTR-BA and ASTP-BS programs were created to offer UH Mānoa students a pathway to one of Hawai'i's signature fields of scientific research. The programs bridge a long-standing gap between K-12 education and UH Mānoa's Astronomy PhD program, which has a 50-year record as one of the top programs in the country.
- The ASTR-BA and ASTP-BS programs and associated minors expand the range of options for students on the UHM campus.
- Both programs have grown steadily since inception, doubling total undergraduate enrollment in P&A.

Why will this continue as a priority for the campus/college?

- Astronomical research is consistently cited as a strength of UHM which in turn helps build a cadre of outstanding graduate students. Offering undergraduate degrees in astronomy and astrophysics helps directly feed UHM's astronomy graduate program, which through K-12 outreach links back to our community, serving their interests and creating a local and sustained talent pool to lead Hawai'i astronomy into the future.
- The University's deep investments and commitments to astronomy, through the Center for Maunakea Stewardship, 'Imiloa Astronomy Center, UH Hilo astronomy program, and the Institute for Astronomy, demonstrate the long-term strategic interest UH has in astronomy. The ASTR-BA and ASTP-BS programs are natural and essential components of UH's extensive astronomy interests.
- This collaborative program between an Organized Research Unit (IfA) and a College (CNS) demonstrates the benefits of leveraging the strengths of both types of units for undergraduate instruction at UHM.

Will it continue to meet needs and generate demand?

- Astronomy is a foundational science and a thriving field of 21st century research. The strong response to the introduction of the undergraduate programs reflects innate human curiosity about the astronomical universe. Demand is stable and will grow with continued outreach to K-12 schools in Hawai'i. This can form the basis of a STEM pipeline which will create rewarding careers for local students.

Does the program integrate well with programs on this and other campuses? How will developments at other campuses affect this program in the future?

- The ASTP-BS is an interdisciplinary program combining Astronomy, Physics and Math.
- The ASTR-BA is designed to "mix and match" with other degrees, certificates, and minors.
- Our programs complement UH Hilo's established Bachelor of Science in Astronomy, leveraging strengths of both institutions.
- The anticipated availability of an educational telescope at UH Hilo will expand opportunities for collaboration between campuses.

Assess how well the program met proposed enrollments, completions, operating and instructional resource and facility needs?

- Enrollment in the ASTP-BS program has consistently exceeded projections, while enrollment in the ASTR-BA has been somewhat less than expected. Both programs have grown steadily, and total enrollment is now approaching the projected level.
- Our projections assumed 100% persistence, so completion rates are lower than projected. Actual persistence rates are comparable to those of other CNS programs. Graduates of the ASTP-BS and ASTR-BA programs now account for the majority of P&A's undergraduate degree recipients.
- These programs are offered in a cost-neutral fashion as they rely on existing resources and funding.

What unexpected developments enhanced or challenged the program in its evolution?

- We assumed that most of our students would follow a traditional path to graduation. In practice, it is quite common for students to transfer between institutions, and between majors at UH Mānoa. Students who transfer from outside the UH system are very welcome, but fitting their existing courses into our programs can be challenging.
- Initially, the frequency with which students changed majors was disconcerting. In time, we came to understand that they are finding their niche within the university. Many students who formally transfer out of our programs take a minor in Astronomy or Astrophysics, and report that the knowledge they gained is useful in other fields.
- Creating a collaborative program between an Organized Research Unit (IfA) and a College (CNS) presents non-trivial challenges. Consistent communication, collegial relationships, and transparency are all essential.

Defend the recommendation to make the program permanent.

- Hawai'i has unique advantages as an international center of astronomical research and UH's astronomy program is key to advancing the State's scientific strategic interests, utilizing the clear, calm, and dark skies above Hawai'i as an important natural resource. Like the sea that surrounds Hawai'i and the rich geologic diversity that comprises Hawai'i's islands, research predicated on these unique natural resources (earth, sea, sky) is what helps define Hawai'i's role in a global sense. Hawai'i's natural resources justify long-term education and research commitments to them, by the University, for the betterment of the State.
- The ASTR-BA AND ASTP-BS programs give UH Mānoa undergraduates an opportunity to study Astronomy and Astrophysics without having to travel to mainland institutions. Program graduates can start or be hired by high-tech industries, helping to reduce Hawai'i's dependence on tourism.
- Astronomy has deep connections to Hawai'i's past and future; it is fitting and indeed critical that the State's flagship university offer undergraduate programs in this subject.

ACTION RECOMMENDED:

It is respectfully recommended that the Board of Regents grant established status to the BACHELOR OF ARTS IN ASTRONOMY and the BACHELOR OF SCIENCE IN ASTROPHYSICS in the COLLEGE OF NATURAL SCIENCES at the University of Hawai'i at Mānoa.

ATTACHMENTS:

APPLICATION TO ESTABLISH UNDERGRADUATE PROGRAMS IN ASTRONOMY AND ASTROPHYSICS, [APPROVAL OF PROVISIONAL STATUS FOR BA IN ASTRONOMY AND BS IN ASTROPHYSICS](#)

cc: Executive Administrator and Secretary of the Board Kendra Oishi

Application to Establish Undergraduate Programs in Astronomy and Astrophysics

Astronomy Undergraduate Committee: Joshua Barnes (chair), Duncan Farrah,
Roy Gal, Shadia Habbal, Eugene Magnier, Karen Meech, Mike Nassir

April 9, 2022

1 Executive Summary

This document¹ reviews the Astrophysics Bachelor of Science (ASTP–BS) and Astronomy Bachelor of Arts (ASTR–BA) degree programs at the University of Hawai‘i at Mānoa (UHM). These two programs were jointly proposed in 2014 and granted provisional status on August 21 of that year. Students began registering in significant numbers in Fall 2015. Two one–year extensions on conversion to permanent status were requested and approved so we could gather more data and deal with the COVID–19 pandemic.

The Institute for Astronomy (IfA) administers both programs (hereafter, the ASTRO programs), and IfA faculty teach the Astronomy content, while faculty in the Department of Physics and Astronomy (P&A) teach the Physics content. Both programs are formally housed in P&A.

Although the ASTRO programs have many courses in common, they have very different formats and objectives. These were designed so that neither program competes with the existing ASTR–BS major at UH Hilo, which leverages proximity to Hawai‘i Island facilities in a program that emphasizes telescope observing and operation. The ASTP–BS program is tightly structured around a core of the existing PHYS–BS major, with the goal of preparing students for graduate study in Astronomy, Physics, or related fields, or for technical careers. The ASTR–BA program was developed, at the suggestion of former CNS (College of Natural Sciences) Dean William Ditto, to prepare students with interests in Astronomy for careers in STEM education, astronomy administration, science journalism, or public outreach. This program is structured around a sequence of Astronomy courses with basic Physics prerequisites, giving students the option to include more rigorous courses or to mix and match the ASTR–BA with other programs.

The ASTRO programs are closely aligned with UHM’s strategic goals, including research excellence and student success. Hawai‘i is a global center of astronomical research, and the IfA’s graduate program has been producing world–class astronomers for half a century. The ASTRO programs were created so that undergraduates at UHM can fully participate in one of Hawai‘i’s greatest scientific enterprises; the new programs also support Hawai‘i’s growing high–tech industry. With our existing graduate program and outreach to K–12 schools, we can now offer Hawai‘i students an integrated pathway to careers as research astronomers and knowledge workers in STEM fields.

Enrollment and graduation rates in P&A increased following the introduction of the two ASTRO programs. Both programs continue to grow, and there’s no sign that we have tapped the supply of potential students. The ASTP–BS program attracts the majority of our

¹Based on `Provisional-to-Established-Proposal-.docx` template, available at manoa.hawaii.edu/ovcaa/program-approval-review/established-status-request-for-degrees/

students. While the ASTR–BA program is smaller than expected, it has a definite appeal for students who want to study astronomy without a heavy dose of physics. ASTP–BS students progress in cohorts and complete on schedule; ASTR–BA students progress individually. By number of graduates, our program ranks 24th out of 34 comparable programs, many housed at institutions much larger than UHM. We find that ASTP–BS graduates (and minors) frequently go on to graduate school or employment in STEM fields, while ASTR–BA students are more likely to become STEM educators.

The ASTRO programs draw on existing faculty at IfA and P&A, and leverage existing observational facilities. Consequently, *these programs can be offered in a cost-neutral fashion* as they rely solely on existing resources and funding.

In terms of program organization, the ASTR–BA is similar to other CNS majors with basic Physics requirements, while the ASTP–BS is truly interdisciplinary, with a modest tilt towards Physics courses. ASTRO program class sizes are generally comparable to those in upper-division PHYS classes. Non-majors, including ASTRO minors, Physics majors, and other CNS students, account for $\sim 30\%$ of ASTR SSH above the 100-level. The ASTRO programs are highly productive, despite their small size, because they use resources already allocated to teaching Astronomy.

Capstone research projects and papers, required in both programs, vary in quality but include outstanding (and professionally published) work. For ASTP–BS majors, the heavy load of required courses may limit research effort. Compared to other majors, ASTR–BA majors take ~ 1 year more to graduate, but by other quantitative measures (credits and GPA at graduation, persistence) the ASTRO programs are close to CNS averages. We are introducing career planning and research guidance in the early stages of both majors to improve program outcomes and employment prospects. The ASTRO programs can already boast of a number of graduates who have gone on to graduate schools and STEM jobs in Hawai‘i and on the mainland.

Looking forward, there are several directions for future development which will increase the value of the ASTRO programs:

- Not all of our students understand the culture of scientific research; we are developing a 1-credit at the 100-level course to introduce research topics and related skills.
- Programming is critical for graduate school in Astronomy, and valuable for anyone contemplating a STEM career; our students need more experience with computing.
- To be more employable, students in the ASTR–BA program should be encouraged to take minors, certificates, or second majors in synergistic subjects; we plan to work with the College of Education and other potential partners toward this goal.
- The ASTRO programs are a novel interdisciplinary collaboration between an Organized Research Unit and an Academic College. UHM aims to foster such connections; by “breaking the path” we hope to encourage similar partnerships.
- Credit for the programs should be shared between IfA and P&A in proportion to the number of classes or credit-hours each contributes.

2 Program Alignment

The UHM vision, as articulated in the most recent Strategic Plan (SP), states that “We will be locally and globally recognized as a premier student-centered, Carnegie Research 1, community-serving university”. Two of the four Strategic Goals are research excellence and student success. With some of the world’s most productive astronomical observatories on Maunakea and Haleakalā, development of observing technologies used in current and future ground- and space-based telescopes, and vast datasets from our sky surveys, it is essential to have a vibrant astronomy undergraduate program. As the SP recognizes, “Our unique

location facilitates advances in our internationally renowned research in earth and ocean sciences, astronomy”.

Both astronomy undergraduate degrees combine classroom learning, leveraging the diverse and extensive expertise of the astronomy and physics faculty, with required research projects, taking advantage of our unique access to telescopes, instrumentation, and astronomical data. With these resources, we are clearly aligned with Student Success, which the SP describes explicitly: “The success of our students is interconnected and related to our ability to provide excellent academic programs, outstanding teaching and research learning opportunities, high levels of student engagement”, which are exactly what our undergraduate program seeks to do. As we discuss in § 3, we have produced quite a few successful graduates, despite facing both a recession and COVID during the probationary period for our program.

In terms of the Strategic Goal of Research Excellence, astronomy at UHM is already successful. With the inclusion of these undergraduate degrees, this long history of research productivity is extended to our students. We are already incorporating mentoring across academic levels – faculty, graduate students, undergraduates – to develop and enhance a culture of research among our students.

The need for an astronomy undergraduate program was also identified in the 2012 Visiting Committee Report to the IfA, which “strongly endorses the plans to introduce the proposed undergraduate majors in astronomy. They will be important programs that will help the IfA to fulfill its broader obligations to the state.” This report led to the creation of the ASTR–BA and ASTP–BS programs.

UHM’s peer institutions universally offer Astronomy undergraduate degrees, and there is evident need for such a program here. After only a few years, we already have a relatively large program, and have begun producing graduates who are going on to graduate school, or employment in data-intensive fields where the skills learned through our degree are highly desirable.

The just-released Decadal Survey of Astronomy & Astrophysics highlights the need for increased representation of underrepresented groups, including women, minorities, and indigenous populations. They specifically note that “Funding to PIs at tribal colleges, from Indigenous communities, or at institutions that predominantly serve Indigenous populations, would enable long-term research partnerships and culturally supported pathways for full participation of Indigenous people in science careers.” Astronomy faculty hope to use such resources to improve representation within our program, and to deepen our commitment to UHM as a Native Hawaiian Place of Learning.

At present, the astronomy community across the Hawaiian islands employs over 1000 people, and generates about \$100 million in local expenditures, the vast majority of which comes from extramural funds. Employees are not just scientists, but include management, technical, and support staff at the observatories, as well as personnel at the IfA. Our degree programs prepare students for employment as telescope operators, instrument technicians, and other highly-skilled jobs for which there is currently demand but difficulty finding trained individuals locally. Hawai‘i also hosts a small but growing high tech/data science hub. Currently employing about 31,000 people², including several hundred data scientists, Hawaii’s tech hub is a priority for development over the next decade as part of the “Hawai‘i 2.0” effort to diversify the economy. These sectors are envisaged as the primary employment destinations for the ASTP–BS and ASTR–BA graduates. A secondary destination is projected to be science educators; the state faces a critical shortage of Hawai‘i Qualified Teachers, who are required to have a college major or 30 credits in their subject area. ASTRO program graduates and minors meet these requirements.

²<https://www.bizjournals.com/pacific/news/2021/04/06/hawaii-tech-teconomy.html>

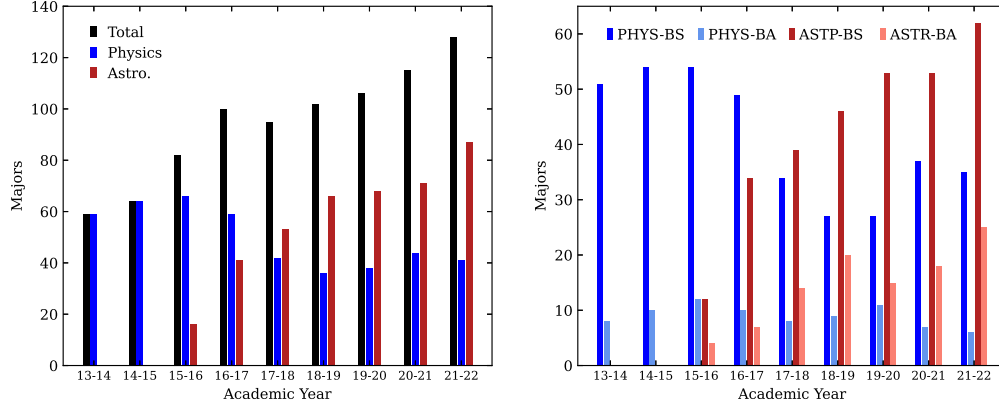


Figure 1: P&A majors by academic year. **Left:** registered majors in each subject. **Right:** BS and BA majors are plotted separately. *Total P&A enrollment (black bars) grew rapidly after the ASTRO majors were introduced.*

Program	Majors	F15	F16	F17	F18	F19	F20	F21
ASTP-BS	Projected	12	24	36	36	36	36	36
	Registered	12	34	39	48	53	53	62
ASTR-BA	Projected	20	40	60	60	60	60	60
	Registered	4	7	14	20	15	18	25

Table 1: Number of majors in the ASTP-BS and ASTR-BA programs by year.

3 Enrollment & Graduation

3.1 Enrollment

The relationship between Physics and Astronomy enrollment is illustrated in Figure 1, which plots registered P&A majors by year. While the new programs diverted some students who would otherwise have majored in Physics, the marked increase in the total number of majors shows that *the ASTRO programs brought many new students into P&A, doubling the overall enrollment.*

Table 1 shows the number of majors in the ASTP-BS and ASTR-BA programs by academic year. Projected majors come from Table G.1 of the ASTRO proposal; they were computed assuming that (a) the ASTP-BS and ASTR-BA programs recruit 12 and 20 students per year, respectively, (b) students enroll in the programs as sophomores, (c) students then finish in three years, and (d) 100% persistence. Registered major counts are provided by the Manoa Institutional Research Office (MIRO) and refer to the start of each academic year. *The ASTP-BS program is larger than projected, while the ASTR-BA program is smaller. Both programs continue to grow with no sign of leveling off; total enrollment is now approaching projected levels.*

The ASTR-BA program clearly has room for further development. Only some of our students take advantage of this program’s flexibility; once permanent status is granted, we will pursue Bachelors to Masters and/or Bachelors to Professional Certificate pathway agreements to bridge the ASTR-BA degree with programs in the College of Education. We

also plan to increase outreach to high-schools to bring more students into both programs, and will apply for extramural funding to do this.

3.2 Progress & Persistence

Not all students who declare a major actually follow through. In Table A.7³ we therefore define Active majors by counting students in the ASTP-BS or ASTR-BA programs who *enrolled in at least one ASTR class* in a given academic year. The progress of these students through the ASTRO programs can be tracked year-to-year by noting when they enrolled in certain milestone courses. The 200-level milestones are ASTR 210 (Foundations of Astronomy), or ASTR 241 and 242 (Foundations of Astrophysics I, II). ASTR 300 (Observational Astronomy) and ASTR 494 (Senior Research Project) are milestones at the 300 and 400-level, respectively.

As of Summer 2021, 31 ASTRO majors have reached the 400-level milestone. This sample includes all students who graduated by Summer 2021 (15 ASTP-BS grads, and 12 ASTR-BA grads), as well as 4 ASTP-BS students who took ASTR 494 in AY 20-21 but have not yet completed their degrees.

For the 19 ASTP-BS students, 15 progressed from 200-level to 400-level in 2 academic years, 2 students took 3 years, and 2 students took only 1 year (by doubling-up milestone courses). The average is precisely 2.0 years. While some of these students faced delays in passing the prerequisites for ASTR 241, we see that *ASTP-BS students progress in cohorts and generally hit milestones on schedule*.

For the 12 ASTR-BA students, 6 progressed in 2 years, 5 took 3 years, and 1 took 4 years. The average for this sample is 2.6 years. *ASTR-BA students are “self-paced” and do not progress in cohorts*.

Table A.7 also shows how active majors, as defined in § 3.2, are distributed by academic level. Absent attrition, we would expect equal numbers of 200, 300, and 400-level students (once the system reaches a “steady-state”). The shaded cells in this table indicate where we think a steady-state is realized, and the “Mean” values on the far right are steady-state averages. These values allow us to quantify persistence.

For the ASTP-BS program, roughly 70% of the majors who reach each milestone go on to the next. This is supported by a review of individual transcripts. Other CNS programs have similar persistence rates (see Table A.8). Some attrition, especially for students in the early stages of their studies, is expected: the ASTRO programs are open majors, and the ASTP-BS program in particular is more challenging than some students expect. Students who transfer out of the programs at later stages typically stay within CNS, favoring Physics and Mathematics.

For the ASTR-BA program, the situation is more complex. Review of individual transcripts suggests an intrinsic persistence rate comparable to the ASTP-BS program. In addition, the ASTR-BA program *gains* a few majors from ASTP-BS each year; fully half of the 12 ASTR-BA seniors started out as ASTP-BS majors. Some of these students had difficulties with upper-division courses and opted for the less-demanding degree.

The ASTRO programs, along with the Physics BS and BA, do not function as separate entities. Students can and do freely transfer between them, without sacrificing academic progress, as their interests develop. *The options afforded by these programs serve student interests more effectively than any single program could*.

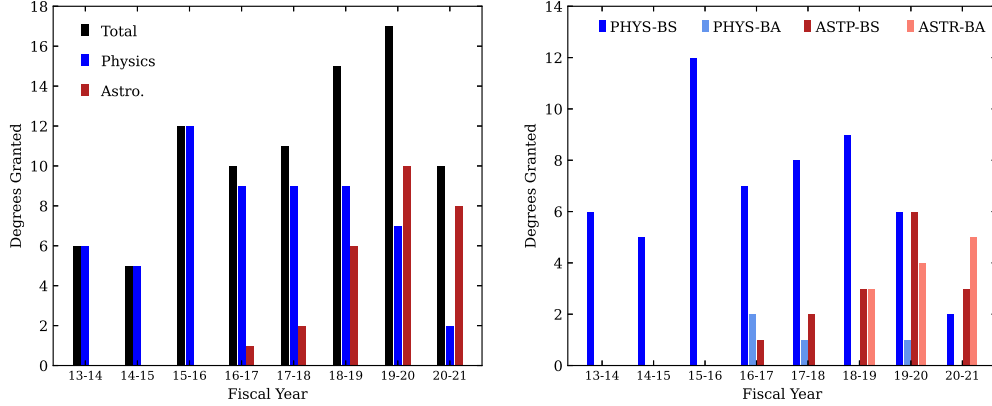


Figure 2: P&A graduates by fiscal year. **Left:** total number of graduates in each discipline. **Right:** BS and BA majors are plotted separately. Due to the pandemic, a number of FY2020–21 seniors have not yet graduated.

Program	Graduates	15–16	16–17	17–18	18–19	19–20	20–21
ASTP–BS	Projected			12	12	12	12
	Actual		1	2	3	6	3
ASTR–BA	Projected			20	20	20	20
	Actual				3	4	5

Table 2: Projected and actual graduates from the ASTP–BS and ASTR–BA programs by fiscal year.

3.3 Graduation

Fig. 2 plots all P&A graduates by year. BS and BA degrees are again aggregated on the left, and plotted separately on the right. The total graduation rate increases markedly from AY 2018–19 on as ASTRO students begin to graduate in significant numbers.

Table 2 shows projected and actual graduation rates for the ASTP–BS and ASTR–BA programs by academic year. The ASTRO proposal did not make separate year–by–year projections for the two majors, so the numbers listed here are based on the assumptions listed in § 3.1. These assumptions included a high rate of enrollment in the ASTR–BA program and 100% persistence, both biasing the projections upwards.

Actual graduation rates in Table 2 roughly track the tallies of 400–level students in Table A.7. This is expected; to date, all ASTRO students who reach their senior year stay in the programs (although late–stage transfers from ASTP–BS to ASTR–BA can occur). The upward trend in actual graduation rates was disrupted by the pandemic in AY 20–21. Of the 7 ASTP–BS majors who completed capstone projects in time to graduate that year, 4 had to delay graduation to repeat non–ASTR courses or address financial difficulties; 1 has since graduated, and another 2 are expected to graduate this Spring.

Our graduation rate can be compared to those of US institutions granting Astronomy PhDs as well as undergraduate Astronomy or Astrophysics degrees. According to American Institute of Physics (AIP) surveys, there are 34 such institutions. Each grants an average of

³Tables and figures with an “A.” prefix are collected in Appendix A.

15.8 undergraduate degrees per year (average over AY 2018 – 2020), but the distribution is quite broad, and the upper end is dominated by institutions *much* larger than UH Mānoa. Our program ranks about 24th. For a new program in a relatively small state, this is quite remarkable.

3.4 Demographics

Demographic data for all P&A program majors and graduates, extracted from MIRO Unit Profile Reports, appear in Table A.9. ASTRO graduates and ASTR–BA majors are evenly distributed between women and men, while ASTP–BS majors tilt $\sim 40:60\%$ toward men. In comparison, PHYS majors and graduates are more likely to be male ($\sim 30:70\%$ and $\sim 40:60\%$, respectively). Presumably due to Hawaii’s reputation for Astronomy, the ASTRO programs attract many mainland and international students; $\sim 60\%$ of the ASTRO majors, compared to $\sim 35\%$ of the PHYS majors, are from out-of-state. It seems plausible that differences in racial makeup are driven by differences in geographic origin (e.g., the large cohort of ASTRO majors from the mainland reflect the racial and ethnic mix of that population, including mainland minorities). However, the total number of students is too small to support a detailed discussion of distribution by race or ethnicity.

3.5 Graduate Schools and Jobs

In Summer 2021, we surveyed ASTRO program graduates and minors to see what they were doing post-graduation. To date, 59% (22/37) have responded; Table A.10 summarizes the results. All told, 50% (11/22) of those responding were admitted to graduate or professional programs at UHM (7/22) and on the mainland (4/22). The ASTP–BS graduates (and ASTRO minors, who generally have BS degrees) are all studying STEM subjects, while the ASTR–BA graduates are more likely to study Education. Another 32% (7/22) of those responding went directly into the workforce, almost all in technical fields (e.g., programming, data science). Just 18% (4/22) of those responding reported they were not working; most are recent graduates who are taking time off or looking for specific employment.

4 Instructional Resources

The ASTRO programs were created by combining new ASTR courses with existing PHYS courses. Most of these ASTR courses are taught by IfA members under a long-standing arrangement with CNS; some instruction is also provided by P&A personnel hired to support the ASTRO programs. While ASTP–BS majors have increased enrollment in upper-division PHYS courses, only one course, PHYS 485 (Professional Ethics), requires a second section, taught by IfA faculty. *The ASTRO programs are offered at no additional cost to P&A*⁴.

4.1 IfA faculty

At the time the undergraduate programs were proposed, the IfA had 36 tenured or tenure-track R or S faculty, including support personnel for the observatories. We did not project any change in this total (Table 3). The ASTRO proposal (p. 8) lists 32 of these faculty as potential ASTR instructors – although this list, which included the Director as well as several people with critical observatory roles, was somewhat aspirational. Each semester, 16 faculty were temporarily assigned 0.25 FTE instructional positions funded by CNS. This provided 96 cr/yr (credits of teaching per year), nominally sufficient for both the graduate

⁴More generally, we note that P&A bears some administrative costs, e.g. in processing Astronomy TAs.

	15–16	16–17	17–18	18–19	19–20	20–21	21–22
Projected IfA Faculty	36	36	36	36	36	36	36
Actual IfA Faculty	36	33	33	32	33	32	33
Projected P&A Faculty	1	2	2	2	2	2	2
Actual P&A Faculty	1.2	1.2	0.2	1.2	1.2	1.2	1.2

Table 3: Personnel for ASTR courses by year. All tenured or tenure-track IfA faculty are counted, regardless of role. The tally for P&A is limited to personnel who support the ASTRO programs (see § 4.2).

and undergraduate programs. In addition, CNS funded 8 TA positions, predominantly supporting service courses.

Instructional resources within the IfA have contracted since the programs were approved. Of the 32 faculty listed in the ASTRO proposal, 9 are no longer with the IfA, while 7 tenure-track R faculty have been hired. To support the undergraduate programs, 2 existing IfA faculty with S positions have assumed significant instructional responsibilities.

4.2 P&A faculty & instructors

The ASTRO proposal (p. 7) lists 18 tenured or tenure-track P&A faculty with I appointments, and 3 I-2 instructors. Of the 18 faculty, 4 are no longer with P&A, while 4 tenure-track I faculty have been hired. Thus, P&A’s staffing level has been fairly stable. Contingent on program growth, we projected that one new P&A hire would be needed in AY 2016–17.

In 2013, CNS funded a new I-2 position in P&A to support the development of the ASTRO program. Duties as outlined in the ASTRO proposal (p. 18) included service teaching (12 cr/yr), developing and teaching an upper-division lab course (2 cr/yr), and support for remote observing; the person we hired also had significant expertise in program assessment. This individual took a tenure-track job on the mainland at the end of Spring 2017.

The vacant I-2 position was converted to an S-3 position, and a new hire was made by a joint P&A and IfA personnel committee in Fall 2018. Duties specified in the position description include program assessment and revision, helping faculty improve teaching methodologies, advising majors, coordinating capstone projects, articulation with other programs, and teaching both ASTR (8 cr/yr) and PHYS (3 cr/yr) courses. Unlike the earlier I-2 position, this position was charged against the funds CNS provides to the IfA to support ASTR teaching.

One individual in a long-standing P&A I-2 position has taken on a significant role supporting the ASTRO programs and ASTR service courses: they provide semi-annual academic advising for all ASTRO majors, devise alternate program requirements for students with special interests, and coordinate Astronomy TAs. Most of this additional work is *not* part of this individual’s assigned duties for P&A. This effort amounts to approximately 0.2 FTE, which is covered as “Salary Overload” by the IfA using discretionary funds – an awkward scheme which we would like to replace with a more rational arrangement.

4.3 ASTR teaching loads

We currently offer a total of 96.5 cr/yr of ASTR courses, following the two-year schedule in Table A.11. This tally does not include courses cross-listed from other fields. Graduate and undergraduate courses account for 34.5 and 62 cr/yr, respectively. The undergraduate total includes 35 cr/yr attributed to the ASTRO program courses at the 200 to 400-level.

Out of this grand total, 5 cr/yr of ASTR 110L (Survey of Astronomy Lab) are taught by TAs. Co-instruction of ASTR 430 and 630 (The Solar System) saves 1.5 cr/yr. The S-3 position in P&A teaches 8 cr/yr. The remaining 82 cr/yr are taught by IfA faculty.

The IfA is developing but has not yet finalized a workload policy. To estimate the resources available, we assume that each faculty member listed in Table A.12 teaches 3 credits per year unless excused (e.g., people with major operational roles or “soft money” funding). This yields a total of 87 cr/yr, with 72, 9, and 3 available on Oahu, Maui, and Hawaii Island, respectively. However, Hawaii Island faculty teach 50% at UHH, reducing the total available to 84 cr/yr.

In practice, the number of credits we need to offer exceeds the number readily available. This shortfall is due to factors such as sabbaticals, medical emergencies, geographical distribution of faculty, specialization, and imperfect allocation of available faculty. To offer both graduate and undergraduate programs, some IfA faculty must teach well over 3 cr/yr. Efficient and equitable staffing of ASTR courses is a non-trivial issue. We are developing a workload policy supporting “extra” teaching to ensure that our academic programs are sustainable.

4.4 Budget

Table 4 estimates tuition revenue by multiplying actual SSH from program classes (Table 6) by the in-state tuition rate for each academic year. This estimate is quite conservative as it ignores the high percentage of out-of-state students (§ 3.4), who pay up to ~ 2.9 times more. The ASTRO proposal included a program fee of \$500 per semester, to start in AY 2016-17; this fee was not implemented.

	15-16	16-17	17-18	18-19	19-20	20-21
Tuition (\$)	570,200	647,800	679,500	735,000	737,600	690,500

Table 4: Estimated tuition from ASTRO program (ASTR + PHYS courses) by academic year, rounded to the nearest \$100. We did not apply for any grants.

Table 5 shows Total Direct and Incremental Costs from the “Academic Cost and Revenue Template” in the ASTRO proposal. The projected costs included the FTE for faculty required to teach both ASTR and PHYS courses. Actual costs are much lower since most of the teaching and mentoring is done by existing IfA and P&A faculty. These costs include full salary and overhead for one I-2 position (AY 2015-17) and the S-3 position (AY 2018-present), 0.2 FTE for the other I-2 position (AY 2015-present), and TA support for ASTRO program courses. Non-salary costs, discussed below, were included but are minimal.

	15-16	16-17	17-18	18-19	19-20	20-21
Projected Costs (\$)	264,160	499,160	589,160	514,160	532,052	550,656
Actual Costs (\$)	148,200	153,800	64,700	171,300	197,500	198,700

Table 5: Projected and actual costs for ASTRO program courses by academic year. Actual costs have been rounded to the nearest \$100.

4.5 Facilities & Equipment

The original ASTRO budget included funds for computer hardware and software, an optics laboratory, and \$150,000 for 25% of a robotic telescope to be located on Hawaii Island and shared between UHH and UHM. These funds were not allocated following program approval.

The IfA used RTRF funds of \$1,500 to buy a consumer-grade desktop computer in 2016. This machine is used as a web server for both undergraduate and graduate ASTR classes, and as a compute engine for undergraduate projects. IfA funds of \$3,500 were also used to buy a pool of three laptops to be loaned to undergraduates.

ASTR 300L (Observational Astronomy Lab), which would have used the optics lab, is now focused exclusively on computer-based exercises.

The ASTRO programs do not have a dedicated teaching telescope. ASTR 301 (Observational Astronomy Projects) has made intermittent use of the UH 88" telescope, and some student projects have used LCOGT, a global network of robotic telescopes.

5 Program Organization

The ASTRO programs are collaborations between the IfA and P&A, but they have different mixtures of courses. Table A.13 shows the number of ASTR, PHYS, and MATH classes (including electives) and credits in each program, while Appendix B summarizes the formal requirements. The ASTR-BA requires two semesters of Physics (plus PHYS 485) and two semesters of Calculus; ASTR, PHYS, and MATH provide 64:19:17% of the credits, respectively. In contrast, the ASTP-BS requires four years of Physics courses culminating in PHYS 480 (Quantum Mechanics I), four semesters of Calculus, and one 300-level MATH course; ASTR, PHYS, and MATH provide 34:45:21% of the credits. Thus, the ASTR-BA is similar to other CNS majors with a basic Physics and Math requirements, while the ASTP-BS is truly interdisciplinary.

As the Physics and Math components of both majors are well-established, we focus here on the Astronomy components.

5.1 Changes to programs

The following changes were made since the ASTRO programs were approved in Fall 2014:

- *Fall 2015*: Renumber ASTR 240 (Foundations of Astronomy) to ASTR 210.
- *Fall 2018*: Reconfigure ASTR 494 (Senior Research Project), with research component now provided via ASTR 399 (Directed Reading & Research).
- *Fall 2018*: Change ASTR 423 (Stellar Astrophysics) from a required course to an elective, given every other year.
- *Spring 2020*: Make ASTR 110 (Survey of Astronomy) a requirement for the ASTR-BA program and a prerequisite for ASTR 210.
- *Fall 2021*: Introduce ASTR 470 (General Relativity & Cosmology) as a potential elective at the 400-level.
- *Fall 2021*: Change the name and catalog description of ASTR 380 (History of Cosmology and Scientific Thought).
- *Pending*: Add ASTR 470 to the formal lists of electives for the ASTRO programs.
- *Pending*: Introduce ASTR 197 (Introduction to Astronomy Research), a 1-credit course orienting students toward research and providing basic skills. We expect this will increase persistence and student success, and reduce time-to-graduation.

These changes simplify program administration, ensure that faculty who mentor senior projects are recognized for their efforts, bolster the preparation of ASTR-BA students, and

expand the set of 400-level electives so that we can offer one each semester (on a two-year cycle).

Further changes to the ASTRO programs are contingent on a number of factors. The ASTP–BS major currently requires 124 credits, and we’re reluctant to require more. The redesign of the General Education requirements and initiatives within CNS to reassess language requirements may provide room to make changes. Our priorities include:

- Make ASTR 197 a permanent course and a requirement for both ASTRO programs.
- Make ASTR 110 a requirement for the BS–ASTP program and a prerequisite for ASTR 241 and 242.
- Make ASTR 110L (Survey of Astronomy Laboratory) a requirement for the ASTRO programs and a prerequisite for ASTR 300/300L.
- Add ICS 110P (Introduction to Computer Programming in Python) as a requirement for the ASTRO programs and a prerequisite for ASTR 300/300L.

These changes would give students a better foundation in scientific research, ensure they have a broad knowledge of astronomy and some basic grounding in observation, and provide valuable skills in software development. We are also looking into ways to strengthen the ASTR–BA, possibly by upgrading the Physics and Math requirements, or by increasing the capstone project’s duration, scope, or range of options.

5.2 Courses, Sections, & SSH

Table 6 summarizes courses, sections, and SSH. The projections shown here are taken from Appendix G of the ASTRO proposal; they are based on assumptions (a)–(d) in § 3.1, along with sample 4–year plans (ASTRO proposal, Appendix B). Since we assumed that students would declare majors at the start of their second year, *only courses taken from year two on were counted*. These courses are ASTR 240 (now 210), 241, 242, 280, 281, 300, 300L, 301, 320, 380, 423, 426, 430, 494, and PHYS 152, 152L, 272, 272L, 274, 274L, 310, 311, 350, 400 (included as a generic Physics elective), 450, 480, 485 (ASTRO proposal, Table G.2).

All 13 of the PHYS courses listed above were in regular annual rotation prior to Fall 2015. IfA faculty were already offering the 200–level ASTR courses, as well as ASTR 380. The remaining 300–level ASTR courses started in AY 15–16; 400–level courses followed the next year. As Table 6 shows, we did not offer all of the projected courses. Two required ASTR classes (ASTR 210, 423) were canceled due to low enrollment. Limited availability of IfA faculty forced us to cancel several 200 and 300–level electives; all have since resumed except for ASTR 380, which was last given in AY 18–19. None of these cancellations fundamentally impeded any of our majors.

We anticipated the need to offer double sections of three ASTR courses with intrinsically limited enrollment (ASTR 300, 300L, 301) from AY 17–18 on. The ASTRO proposal did not anticipate that extra sections would be needed for any PHYS courses aside from PHYS 485 (a 1–credit course with E and O foci). Thus, we implicitly assumed that all ASTRO students could be accommodated by 14 PHYS sections per academic year, yielding the projected section count shown in Table 6. In practice, we have not yet needed to offer double sections of any ASTR course except ASTR 494, which is routinely offered in both semesters. Thus, the number of actual sections tracks the number of actual courses.

Projected SSH in Table 6 are taken directly from Table G.1 of the ASTRO proposal. In tallying actual SSH, we again assumed that a single section of each PHYS course would be sufficient, and used the average number of SSH per section for each course in each academic year. We note that enrollment in the PHYS and ASTR courses tallied here include many students who are not ASTRO program majors.

SSH for two courses, which were not included in the original ASTRO proposal, are listed separately. ASTR 399 was added as a requirement for both programs in Fall 2018; the SSH

	15–16	16–17	17–18	18–19	19–20	20–21
Projected Courses	23	26	26	26	26	26
Actual Courses	23	26	25	25	23	24
Projected Sections	23	28	31	31	31	31
Actual Sections	23	28	27	27	25	26
Projected SSH	368	860	1324	1324	1324	1324
Actual SSH	1323	1430	1500	1591	1566	1466
ASTR 399 SSH	2	7	2	20	52	37
ASTR 110 SSH	175	154	162	202	192	217
Projected SSH*	520	1048	1512	1512	1512	1512
Actual SSH*	1752	1848	1930	1984	1907	1818

* – Including required MATH courses.

Table 6: Courses, sections, and SSH for ASTR and PHYS courses used in the ASTRO proposal projections, by academic year. We list SSH for ASTR 399 and 110 separately since these were added later. The last two rows show SSH including MATH courses.

for this course are derived from undergraduate research projects mentored by IfA faculty (note that projects mentored by P&A, SOEST, or Engineering faculty are not included). ASTR 110 was added as a requirement for the ASTR–BA degree in Spring 2020. We offer a minimum of 6 sections of ASTR 110 per year; since a single section would suffice for our ASTR–BA majors, we again tally the average number of SSH per section.

To illustrate the interdisciplinary nature of the ASTRO programs, Table 6 also lists projected and actual SSH including the MATH courses (MATH 242, 243, 244, 311) taken in year two onward.

Table A.14 presents some descriptive statistics for ASTR courses, analyzed by academic level. For comparison, we also provide the same data for PHYS courses. At the 100–level, both ASTR and PHYS offer service courses which generate many SSH; the bulk of these students come from outside CNS. PHYS also offers service courses at the 200–level, mostly taken by students in other CNS programs or in Engineering. Upper–division PHYS and ASTR classes generally have similar profiles, which is inevitable since their student populations overlap. SSH for 400–level ASTR courses is low because ASTRO seniors take ASTR 399 (or an equivalent 399 course) as part of their capstone projects.

As Table A.15 shows, students from *outside* CNS account for over 90% of the ASTR SSH at the 100–level. This is largely due to the popularity of ASTR 110, 110L, and 130 (Archaeoastronomy), which are taken by students throughout UH Mānoa to satisfy Physical Science and Laboratory requirements. At the 200–level, the balance shifts dramatically; as a result, it would be misleading to analyze 100 and 200–level classes together. We note that students from other majors still account for nearly 40% of the SSH at this level, and half of these students come from outside CNS. At the 300 and 400–level, ASTP–BS and ASTR–BA majors generate an increasingly large fraction of the net SSH.

5.3 Costs and benefits

Over the last three years, the ASTRO programs have offered an average of 16 credits per semester of classroom instruction at the 200–level and above. This is equivalent to 1.3 FTE I faculty. Fully staffing all currently approved and proposed ASTR courses would require

18 credits per semester (1.5 FTE I faculty). As noted in § 4, *the classes added to provide the ASTRO majors are fully supported by resources already allocated for Astronomy teaching.*

This point explains how the ASTRO programs can be productive despite their relatively small size. To be sure, the majors are not entirely free – creating and administering the programs, teaching the new ASTR classes, and mentoring capstone projects all carry opportunity costs. Moreover, some of these costs are passed on to Physics faculty who have larger upper-division classes, and to faculty in Physics and other programs who mentor some of our students. However, these activities are appropriate for faculty at a Carnegie Research 1 university, and support UHM’s goal of promoting undergraduate research.

Moreover, the benefits of the ASTRO programs are not limited to the graduates we produce. Closer engagement between the IfA and UHM has advantages for everyone. Prior to the introduction of the ASTRO courses, IfA faculty only encountered undergraduates in 100-level service courses with few science majors; we now have a more accurate perspective on UHM students. This, in turn, better positions the IfA to offer our expertise in the service of UHM and its students.

6 Student Learning

Advising: Advising duties are split between CNS and the ASTRO program. Students with less than 30 credits must meet with the CNS advisor for help with General Education and College requirements; the CNS Advising Office also handles major declarations, academic petitions, certifications and other required paperwork, and graduation and academic actions. In addition, semi-annual academic advising is mandatory for *all* ASTRO majors, regardless of level.

Academic advising of ASTRO majors necessarily covers a wide range of issues. First-year students often need help to pick the program matching their goals. These students must *start Math and Physics prerequisites* immediately so they can graduate on-time. Students in the ASTR-BA program need guidance finding upper-division classes, and encouragement to select minors or second majors which offer viable career paths in combination with a liberal-arts Astronomy degree. Finally, majors in both programs need support if their goals change or if they encounter academic obstacles.

In practice, students also seek advice for matters (e.g., senior projects, career choice) which fall outside the scope of academic advising. We have started assigning students informal faculty advisors to provide further support and guidance. Advanced students are often challenged to find mentors for their capstone projects, since they may not be comfortable “cold-calling” faculty at random; we expect that informal advising will help match students up with suitable mentors.

Student alignment with program outcomes: The capstone projects undertaken by both ASTP-BS and ASTR-BA majors provide useful measures of student achievement. While not every project involves all of our student learning objectives, conducting and writing up original research is arguably the key ability we want our graduates to acquire. As of Summer 2021, 19 ASTP-BS and 12 ASTR-BA students have completed capstone projects. Table A.16 summarizes their grades in the two capstone courses, ASTR 399 and ASTR 494.

Broadly speaking, an “A” in ASTR 494 fully satisfies the program objectives, a “B” satisfies most objectives, while a “C” indicates significant deficiencies. Grades in ASTR 399 generally track those in ASTR 494 but are more heterogeneous since they are given by different individuals. A majority of students in both programs produce good projects and final papers, but grades for ASTR-BA students have a broader distribution, from frankly disappointing to truly outstanding. We conjecture that while ASTP-BS students generally

have limited time to invest in research, some ASTR–BA students are able to devote more effort to their capstone projects.

Publication in professional peer-reviewed journals is a strong indicator of student achievement. Two of our students have already published first-author papers *as undergraduates* (see p. 22); others have presented research at Astronomy conferences. Several students now completing degrees are producing work of similar quality, with first-authored or co-authored papers in preparation.

Time to graduation: A total of 66 students took the junior-year milestone course (ASTR 300) in Fall semesters between 2015 and 2020. This sample includes all ASTP–BS and ASTR–BA majors, as well as students taking minors or otherwise interested.

Fig. A.3 shows outcomes for these students: $41/66 = 62\%$ graduated by Spring 2021; of these, roughly three-quarters received degrees by the Spring semester two calendar years after taking ASTR 300. The percentage who graduate two years after taking the ASTR 300 milestone course is consistent with the current UHM average.

To facilitate broader comparisons we summarize and compare in Table A.8 the average number of credits at graduation and the median time to graduation for the ASTR–BA and BS-ASTP programs to those in the Physics major, the CNS averages, and the averages for the College of Engineering.

The credit load for both majors is in line with the CNS and ENG averages, and significantly below those in Physics. The median times to graduation are also comparable to the CNS and ENG averages. Both the credit load and pathways to graduation in both majors are thus reasonable for STEM programs at UH Manoa.

A more detailed breakdown of the credit loads in the ASTRO majors is given in Table A.17. On average, ASTRO majors have ~ 164 credits at graduation, with ~ 119 Manoa credits and ~ 45 transfer credits. There is no significant difference between ASTP–BS and ASTR–BA students. Students who take double majors ($N = 7$) have an average of ~ 185 credits, while those who transfer into the UH system ($N = 11$) have an average of ~ 184 (there is significant overlap between these sub-samples).

Extant challenges are however apparent from these data. While graduation times are consistent with UHM STEM norms, the fraction who do not graduate within four years is still slightly below initial program goals. Moreover, there is a significant disparity between graduation times in the BS and BA programs (see also Fig. A.4). Most ASTP–BS students graduate four semesters after enrolling in ASTR 300, and within a total time of 48 months. Conversely, only a minority of ASTR–BA students achieve this goal, and on average ASTR–BA students take 10 months longer to graduate than do ASTP–BS students.

Our ongoing strategies to address these issues focus on giving students the knowledge needed to plan their degree, and to attribute academic setbacks to factors within their control. They include:

- Incorporating career planning and guidance into freshman level courses that highlight career options for both majors and the steps needed to achieve them.
- Introducing a one-credit seminar course for sophomores, of which a substantial element is career planning with a focus on the Hawaii science community’s needs.
- Enhancing our ongoing academic advising sessions with feedback and experiences gained from our first graduated cohorts.

Persistence: An overview of persistence statistics is presented in § 3.2 and a comparison of retention statistics between the ASTRO program and CNS/ENG averages is given in Table A.8.

The ASTP–BS persistence level is comparable to CNS and ENG norms, while the ASTR–BA level remains somewhat below expectations. We note though that, of those

ASTP–BS and ASTR–BA majors who switch to a different major after taking ASTR 300, most stay within STEM, and over half still take a minor in ASTR (Fig. A.3).

Ongoing strategies for increasing retention include: (1) Increasing the number and visibility of channels of communication between students and faculty, (2) Enhancing the sense of community among the ASTRO majors, to facilitate peer mentoring and transmission of effective study strategies. (3) Thorough and continuous collection and analysis of survey data from program alumni, to identify effective strategies for success.

7 Concluding Statement

Astronomical research in Hawai‘i has made enormous strides since the first observatories were built in the 1960’s. On Maui, solar and nighttime facilities employ 176 people and account for \$31 million in economic output⁵; the Daniel K. Inouye Solar Telescope, now coming online, is the most advanced telescope of its kind in the world, and includes two Hawai‘i–built instruments. The Pan–STaRRS and ATLAS telescopes make UH the world leader in planetary defense, accounting for almost 2/3 of new asteroid and comet discoveries. On Hawai‘i Island, the unparalleled atmospheric conditions atop a shield volcano in the middle of the Pacific Ocean have prompted the development of the world’s most productive ground–based observatories. These international facilities, sponsored by a dozen nations, employ 611 people and generate \$102 million in economic output. Data from Hawai‘i telescopes are used in well over a thousand peer–reviewed research papers per year. Notable achievements include finding the first Solar System objects beyond Pluto’s orbit, tracking stars orbiting the black hole at the center of the Milky Way (Nobel Prize 2020), discovering the first interstellar asteroid, and mapping the supercluster which contains our galaxy. Across the State, astronomy employs over 1300 people, creates high–tech jobs with minimal environmental impact, brings in approximately \$100 million in funding from the national government and from other nations, and generates \$220 million in economic output.

Given astronomy’s role in the State, it’s natural for Hawai‘i institutions to emphasize astronomical education and outreach. Hawai‘i’s citizens, collectively, need to know about astronomy to make informed judgements on its value to the State; individually, astronomy careers should be open to every Hawai‘i resident with interest and ability. UH Mānoa’s PhD program in astronomy, established half a century ago, produces first–rate astronomers. Outreach programs on Oahu, Maui, and Hawai‘i Island hold events for the public and introduce K-12 students to astronomy; targeted programs give high-school students a chance to do astronomical research. Since 1997, UH Hilo, with its proximity to observatory facilities, has offered a Bachelor of Science in Astronomy. But until recently, undergraduates at the UH System’s flagship university were limited to a few 100–level and intermediate–level astronomy courses. The ASTRO programs, which we now propose to establish, will leverage our access to observatories statewide, and our extensive complement of faculty, to offer a world–class suite of educational pathways opening careers in astronomy and related STEM fields to students across the islands of Hawai‘i.

⁵UHIRO 2019 update on Economic Impact of Astronomy in Hawaii.

Appendix A: Other Data

Program	Majors	15–16	16–17	17–18	18–19	19–20	20–21	Mean
ASTP–BS	200–level	5	15	15	12	11	16	13.8
	300–level	2	3	10	9	11	7	9.3
	400–level	0	2	2	6	6	7	6.3
	Other	9	4	3	3	4	9	
	Total	16	24	30	30	32	39	33.7
ASTR–BA	200–level	2	1	4	2	0	4	2.2
	300–level	0	2	3	4	4	1	3.0
	400–level	0	0	0	5	3	4	4.0
	Other	1	3	4	6	5	5	
	Total	3	6	11	17	12	14	14.3

Table 7: Active majors in the Astrophysics and Astronomy programs by academic year. Level of study is determined using enrollment in milestone courses (see § 3.2). Means are computed using the shaded cells.

Program	Credits at Graduation	GPA at Graduation	Median Time to Degree	Persistence (percent)
ASTR–BA	159.0	2.98	4.67	55.9
ASTP–BS	158.7	3.23	4.11	73.9
PHYS (BS+BA)	173.0	3.23	7.75	64.7
CNS (BA)	148.7	3.18	4.11	72.1
CNS (BS)	155.3	3.35	3.89	73.5
ENG (BS)	152.0	3.13	4.33	76.8

Table 8: MIRO Program Review Statistics (FY18–FY20 averages). The median time to degree for Physics is *formally* correct but reflects only a small minority of all Physics graduates.

Demographic	Enrollment (%)			Degrees (%)		
	ASTP	ASTR	PHYS	ASTP	ASTR	PHYS
	BS	BA	BA+BS	BS	BA	BA+BS
Female	43	49	28	50	50	39
Male	57	51	71	50	50	61
Hawaii	41	40	66	50	67	67
US Mainland	54	54	29	50	25	33
International	5	6	4	0	8	0
American Indian/Alaska Native	0	1	0	0	0	0
Asian	11	28	21	33	58	22
Black/African American	4	1	0	0	0	0
Hispanic/Latino	1	1	0	0	0	0
Multiracial	14	18	29	0	8	33
Native Hawaiian/Pacific Islander	5	6	12	8	8	11
White	57	36	32	58	8	33
Race/Ethnicity Unknown	9	8	6	0	17	0
Full-time	86	81	76			
Part-time	14	19	24			

Table 9: Demographic data for ASTRO and PHYS students. Enrollment percentages are averaged over FY2018 to FY2021, while degree percentages are averaged over FY2018 to FY2020. Data are taken from MIRO Unit Profile Reports. The MIRO tables for Race and Ethnicity occasionally excluded a few individuals, which we coded here as Race/Ethnicity Unknown.

Program	<i>N</i>	Grad. Sch.	Employed	Unemployed	No Resp.
ASTP-BS	15	5	3	2	5
ASTR-BA	12	2	2	2	6
Minors	10	4	2	0	4

Table 10: Post-graduation activities.

ID	Course Title	Fall (odd)	Spring (even)	Fall (even)	Spring (odd)	Notes
A110	Survey of Astronomy	9	9	9	9	
A110L	Survey of Astronomy Lab	3	3	3	3	TAs teach 5 sec/yr
A130	Introduction to Archaeoastronomy	3		3		
A210	Foundations of Astronomy		3		3	
A241	Foundations of Astrophysics I	3		3		
A242	Foundations of Astrophysics II		3		3	
A280	Evolution of the Universe	3		3		
A281	Astrobiology		3		3	
A300	Observational Astronomy	3		3		
A300L	Observational Astronomy Lab	2		2		
A301	Observational Astronomy Projects		4		4	
A320	Astronomical Spectroscopy		3		3	
A380	History of Cosmology & Scientific Thought		0		0	on hiatus
A423	Stellar Astrophysics				3	
A426	Galaxies & Cosmology			3		
A430	The Solar System		3			with A630
A470	General Relativity & Cosmology	3				
A494	Senior Research Project	1	1	1	1	
A622	The Interstellar Medium	3				
A623	Stellar Interiors & Evolution			3		
A626	Galaxies			3		
A627	Cosmology				3	
A630	The Solar System		3			with A430
A631	Radiative Transfer Stellar Atmospheres		3			
A633	Astrophysical Techniques	3		3		
A634	Astronomical Instrumentation				3	
A640	General Relativity	0				now A760?
A6XX	Solar Astronomy		3			new Solar
A6YY	Plasma Physics				3	courses
A699DR	Directed Research	2		2		
A73X	Astronomy Seminar	2	5	2	5	inc. OoM
A740	Astrobiology Seminar	1	1	1	1	
A750	Scientific Grant Writing	1		1		
A758	Programming & Algorithms for Astronomers		2			
A760	Modern General Relativity	0				cross-list of P760
A777	Star Formation Seminar			2		
A790	Astro-ph Seminar	1	1	1	1	
A791	Cosmology Seminar	1	1	1	1	

Table 11: Class schedule and total number of credits for current and planned ASTR courses.

Name	Island	Type	cr/yr	Notes
Baranec, C.	Hawaii	TT	3	50% in Hilo
Barnes, J.	Oahu	TT	3	
Baxter, E.	Oahu	TT	3	
Boogert, A.	Oahu	RS	0	IRTF Support
Bottom, M.	Hawaii	TT	3	50% in Hilo
Bresolin, F.	Oahu	TT	3	
Bus, B.	Hawaii	RS	0	IRTF Deputy Director
Chambers, K.	Oahu	TT	3	
Chun, M.	Hawaii	TT	0	Assoc. Director, IfA Hilo; 50% in Hilo
Connelley, M.	Hawaii	RS	0	IRTF Support
Cowie, A.	Oahu	TT	3	
Cowie, L.	Oahu	TT	3	
Ebeling, H.	Oahu	RS	0	
Gal, R.	Oahu	TT	3	
Habbal, S.	Oahu	TT	3	
Haggerty, C.	Oahu	TT	3	New solar courses for NSF
Hodapp, K.	Hawaii	TT	0	UKIRT Director; 50% in Hilo
Hu, E.	Oahu	TT	3	
Huber, D.	Oahu	TT	3	
Jedicke, R.	Oahu	TT	3	
Keane, J.	Oahu	RS	0	
Kuhn, J.	Maui	TT	3	
Lin, H.	Maui	TT	3	Assoc. Director IfA Maui
Liu, M.	Oahu	TT	3	
Magnier, E.	Oahu	TT	3	
Meech, K.	Oahu	TT	3	
Mendez, R.	Oahu	TT	3	
Raja, N.	Oahu	TT	0	Computer support
Rayner, J.	Oahu	RS	0	IRTF Director
Reipurth, B.	Hawaii	TT	0	Retiring
Sanders, D.	Oahu	TT	3	
Shappee, B.	Oahu	TT	3	
Sun, X.	Maui	TT	3	
Szapudi, I.	Oahu	TT	3	
Tholen, D.	Oahu	TT	3	
Tonry, J.	Oahu	TT	3	
van Saders, J.	Oahu	TT	3	
Wainscoat, R.	Oahu	TT	3	
Williams, J.	Oahu	TT	3	

Table 12: Nominal teaching loads (cr/yr) for IfA faculty as of Fall 2021. Faculty are classified as TT (tenure or tenure-track) or RS (non-tenured research or support). Hawaii Island faculty who teach divide their efforts between UHH and UHM.

Program	ASTR		PHYS		MATH	
	Classes	Credits	Classes	Credits	Classes	Credits
ASTP-BS	11	27	14	36	5	17
ASTR-BA	11	30	5	9	2	8

Table 13: Classes and credits for the ASTRO majors.

	Subject	100-level	200-level	300-level	400-level
Total SSH/yr	ASTR	1431	145	201	54
	PHYS	5116	1982	229	269
Class size	ASTR	42.1	13.2	12.8	7.1
	PHYS	26.1	21.7	15.7	7.7

Table 14: SSH and average class size for ASTR and PHYS courses by academic level, averaged over three years (AY 2018–19 through 2020–21).

	100-level	200-level	300-level	400-level
ASTRO majors (% SSH)	2.3	62.5	66.3	87.5
CNS majors (% SSH)	4.0	16.7	19.1	8.8
Outside CNS (% SSH)	92.7	20.8	14.6	3.7

Table 15: Distribution of majors in ASTR classes by academic level, averaged over three years (AY 2018–19 through 2020–21).

Program	ASTR 399				ASTR 494			
	GPA	A	B	C	GPA	A	B	C
ASTP-BS	3.59	12	7	0	3.38	8	11	0
ASTR-BA	3.39	6	4	2	3.29	7	2	3

Table 16: Senior project grades.

Sample	N	Total	Manoa	Attempt	Transf.	Adv. Pl.	Extern.
All ASTRO	27	163.6	118.9	128.3	44.7	2.9	27.7
ASTP–BS	15	163.7	125.1	129.5	38.5	4.5	21.5
ASTR–BA	12	163.6	111.2	126.8	52.5	0.9	35.5
1 Major	20	156.1	113.7	123.9	42.4	2.5	23.0
2+ Majors	7	185.3	134.0	140.9	51.3	4.0	41.2
Adv. Pl. cred.	8	152.6	132.0	143.9	20.6	9.8	6.1
Extern. cred.	11	184.0	109.4	116.3	74.7	0.3	67.9

Table 17: Average number of credits at graduation. “Attempt” is number of Manoa credits attempted; “Transf.” is total number of transfer credits; “Adv. Pl.” is advance placement, “Extern.” is credits from outside UH system.

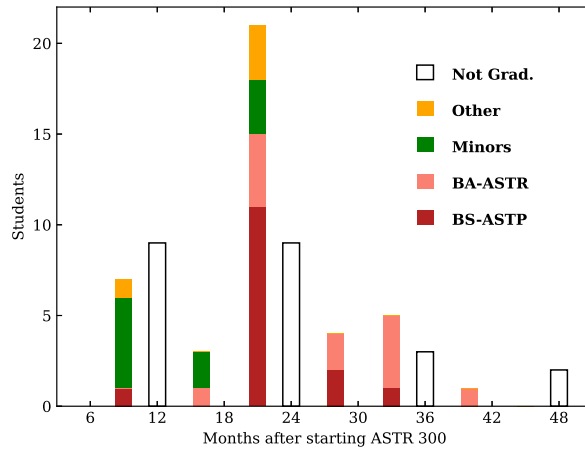


Figure 3: Outcomes for ASTR 300 students. Filled bars represent students who graduated as of Summer 2021 (for simplicity, students graduating in Summer are folded into the previous Spring). Open bars represent students who have not yet graduated; the 9 students not yet graduated at 24 months are the cohort most affected by the pandemic.

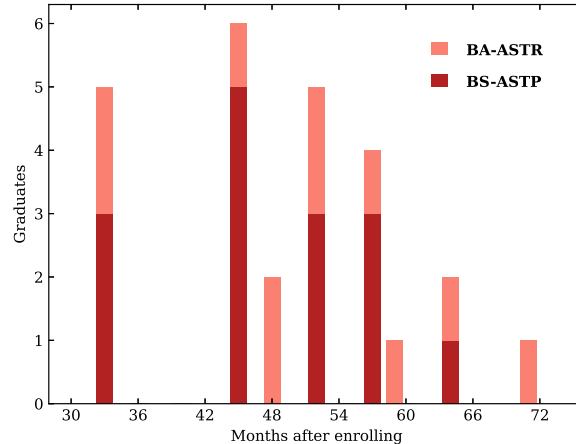


Figure 4: Months between enrolling in UHM and graduating, determined by inspection of transcripts. One ASTR–BA student who took 129 months to graduate is not shown.

Student Achievement

Statistics on graduate destinations – graduate schools and industry careers – are summarized in § 3.5. Below, we highlight a few successes:

John Bredall (ASTP–BS): Graduated Magna Cum Laude and published a first author paper while an undergraduate in a leading professional astronomy journal (Bredall, J., et al; 2020, MNRAS, 496, 3257). He is currently a graduate student in the astronomy department at The Ohio State University.

Marielle Dela Cruz (ASTP–BS): Currently a graduate student in the College of Business at UC Irvine, with a focus on data analytics. She comments of her degree: “I feel very lucky to have my astrophysics background”.

Daichi Hiramatsu (ASTP Minor): Attended graduate school in (astro)physics at UC Santa Barbara, and is now a Postdoctoral Fellow at Harvard University.

Alexandria Holthaus (ASTP–BS): Alexandria is one of our students who elected to stay; upon completing her degree, she was admitted to the Physics and Astronomy graduate program at UH Manoa. She is currently undertaking research in cosmic ray physics.

Kaimi Kahihikolo (ASTP–BS): Kaimi is among our graduates of Hawaiian ancestry, and holds deep family connections with Oahu. After graduating, he took up a data scientist position at Booz Allen Hamilton. He said of the ASTP–BS program: “Studying astrophysics has provided me with a skill–set which placed me higher than many of my peers”.

Caroline Piro (ASTR–BA): Published a first–author paper while an undergraduate (Piro, C., et al, The Planetary Science Journal, Volume 2, Issue 1, id.33) and was the undergraduate representative on the IfA Directors Search Committee. She is currently employed at the IfA as an Academic Support Specialist.

Erica Sawczynec (ASTP Minor): Graduated with honors and presented the results from her undergraduate research at three major astronomy conferences. She is currently preparing these results for publication, and is enrolled as a graduate student in the astronomy program at the University of Texas at Austin.

Bryan Yamashiro (ASTP Minor): Bryan is another student who elected to stay, and was admitted to the IfA’s graduate program. He is now working toward a PhD in Solar Astronomy.

Appendix B: Four-Year Plans & Program Learning Outcomes

Four-year plans

University of Hawai'i at Mānoa – Four-Year Academic Plan 2021-2022					
College of Natural Sciences					
Bachelor of Arts (BA) in Astronomy					
This is a sample academic plan. Students should meet with an academic advisor prior to registration to formulate their own plan.					
Year 1	Year 2		Year 3		Year 4
Fall		Fall		Fall	Fall
ASTR 110 (DP)	3	MATH 242	4	ASTR 300	3
CHEM 161 or 171 (DP)	3	PHYS 152	3	ASTR 300L	2
CHEM 161L or 171L (DY)	1	PHYS 152L	1	DA/DH/DL	3
Group 2	3	Group 1	3	HSL 201	3
FW	3	HSL 101	3	Elective 300+	3
FG (A/B/C)	3				3
					2
					3
					3
					2
Credits	16	Credits	14	Credits	14
					15
Spring		Spring		Spring	Spring
CHEM 162	3	ASTR 210	3	ASTR 301	4
CHEM 162L	1	Group 2	3	ASTR 320	3
MATH 241 (FQ)	4	HSL 102	3	Group 2	3
PHYS 151	3	Elective 300+	3	HSL 202	3
PHYS 151L	1	Elective 300+	3	DA/DH/DL	3
FG (A/B/C)	3				3
					3
					3
					3
					3
Credits	15	Credits	15	Credits	16
					15
Summer		Summer		Summer	Summer
Credits	0	Credits	0	Credits	0
					0
Total Credits	31	Total Credits	60	Total Credits	90
					120

Notes: Students must take placement exams to be able to register for CHEM 161/171 and MATH 241. Students must incorporate all focus designations requirements into this plan. Focus designations (i.e., W, E, O, H) are CRN specific & semester specific. Minimum 45 upper division (300+ course) credits are required.

Group 1: Take 9 credits, at least 3 credits at 400-level and 3 more credits at 300-level+. ASTR 130, 150, 280, 281, 380, 399, 426, 430, 494; ERTH 107. 399 may be taken for a maximum 5 credits. ASTR 150 and ERTH 107 count only if taken before 210; 399 or 494 credits taken to fulfill core requirements cannot be counted toward this elective requirement.

Group 2: (Take 4 courses, at least 3 upper division credits): CHEM 272; EE 160; ERTH 101 or 170, any ERTH course (200+ level); ICS 110C, 110P, 111, 211; MATH 243, 244, 372; PHYS 274, any other MATH or PHYS course at 300+ level or higher.

Rev 3/2021

University of Hawai'i at Mānoa – Four-Year Academic Plan 2021-2022					
College of Natural Sciences					
Bachelor of Science (BS) in Astrophysics					
This is a sample academic plan. Students should meet with an academic advisor prior to registration to formulate their own plan.					
Year 1	Year 2		Year 3		Year 4
Fall		Fall		Fall	Fall
CHEM 161 (DP)	3	ASTR 241	3	ASTR 300	3
CHEM 161L (DY)	1	MATH 243	3	ASTR 300L	2
MATH 241 (FQ)	4	PHYS 272	3	PHYS 310	3
FW	3	PHYS 272L	1	PHYS 350	3
FG (A/B/C)	3	HSL 101	3	MATH 307 or 311	3
				HSL 201	3
					3
					3
					3
Credits	14	Credits	13	Credits	17
					16
Spring		Spring		Spring	Spring
CHEM 162	3	ASTR 242	3	ASTR 301	4
CHEM 162L	1	MATH 244	3	PHYS 311	3
MATH 242	4	PHYS 274	3	PHYS 450	3
PHYS 170	4	PHYS 274L	2	HSL 202	3
PHYS 170L	1	HSL 102	3	DA/DH/DL	3
FG (A/B/C)	3	DS	3		3
					3
					3
					3
Credits	16	Credits	17	Credits	16
					15
Summer		Summer		Summer	Summer
Credits	0	Credits	0	Credits	0
					0
Total Credits	30	Total Credits	60	Total Credits	93
					124

Notes: Students must take placement exams to be able to register for CHEM 161/171 and MATH 241. Minimum 45 upper division (300+ course) credits are required. Students must incorporate all focus requirements into this plan. Focus designations (i.e., W, E, O, H) are CRN specific & semester specific.

Astrophysics Major Courses

Group 1 (take any two): ASTR 320, 423, 426, 430

Group 2 (take any two): PHYS 400 (recommended), 460, 481, 490

Rev 2/2021

Program Learning Outcomes

Our BA astronomy and BS astrophysics student learning outcomes are:

1. Apply basic physical principles to astronomical situations.
2. Formulate scientific problems in mathematical terms and find solutions.
3. Design research projects using professional telescopes, archival data, or numerical simulations.
4. Establish competence in focused areas of astrophysics.
5. Value science as a way to illuminate our place in the universe.



UNIVERSITY
of HAWAII
MĀNOA

UNIVERSITY OF HAWAII
BOARD OF REGENTS

School of Architecture
Office of the Dean

'22 APR 27 A9:24

MEMORANDUM

March 2, 2022

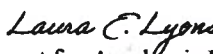
TO: Randolph G. Moore
Chair, Board of Regents


VIA: Ernest Wilson
Chair, BOR Committee on Academic and Student Affairs

VIA: David Lassner
President

VIA: Debora Halbert
Vice President for Academic Strategy, UH System

VIA: Michael Bruno
Provost  for Michael Bruno

VIA: Laura E. Lyons 
Interim Vice Provost for Academic Excellence

VIA: Julienne K. Maeda 
Acting Dean, Graduate Division

VIA: William Chapman
Interim Dean
School of Architecture

FROM: David Rockwood
DArch Program Director 

SUBJECT: REQUEST FOR PROVISIONAL STATUS FOR THE MASTER OF
ARCHITECTURE DEGREE AT THE UNIVERSITY OF HAWAII AT MĀNOA

SPECIFIC ACTION REQUESTED:

It is respectfully requested that the Board of Regents grant provisional status to the Master of Architecture (MArch) degree program in the School of Architecture at the University of Hawai'i at Mānoa.

RECOMMENDED EFFECTIVE TERM/YEAR:

Fall 2022.

ADDITIONAL COST:

No additional cost.

PURPOSE:

(1) Better meet the needs of students who seek to obtain a professional degree, enter the workforce in a reasonable time period and obtain a professional license, (2) Provide a professional degree tailored to the needs of students in advanced architectural practice, and (3) Increase SOA enrollment and resulting tuition revenue.

BACKGROUND:

Significance/Contribution of this degree (address the need of the program):

The MArch degree would provide students with a National Architectural Accrediting Board (NAAB) accredited degree that qualifies them to become a licensed architect. The school's current DArch NAAB accredited degree similarly qualifies students to become a licensed architect. However, the MArch degree requires two years of full-time study in contrast to three years for the DArch. By having an NAAB accredited degree, graduates are qualified to become licensed in all U.S. states. Graduates of the school's non-NAAB accredited Bachelor of Environmental Design (BEnvD) degree can obtain a license in Hawai'i, but only after completing an approved internship that is longer than what is required for holders of an NAAB accredited degree. With the BEnvD they do not hold the educational qualification to become licensed in most all other U.S. states. Through discussions with our students, and as evidenced in a recent student survey, we have found that a MArch program better meets the needs of the majority of our students, most of which are from Hawai'i. Our students have expressed interest in becoming a licensed architect in the shortest possible time, and they wish to have the option of practicing in Hawai'i and any of the other U.S. states.

Demand projections:

Based upon our recent enrollment figures in our DArch program, and in analyzing the recent student survey we anticipate that MArch program enrollment will be around 45 students in year two, growing to around 60 students in year six.

Accreditation impact (if any):

There is no impact to accreditation per se. The school will need to have both the existing DArch and the proposed MArch accredited by the NAAB. Both programs may be put on the same accreditation preparation and visit schedule, thereby reducing time and cost.

Examples (2-3) of similar models from peer institutions:

The DArch program offered by the school is the only such degree offered in the U.S. Therefore, there are no other programs offering both the DArch and MArch degree. There are 120 MArch programs in the U.S. The MArch is currently the most common professional degree and the degree selected by students desiring to enter the profession and become a licensed architect. MArch programs are found at most all top tier universities offering professional architecture programs, such as Harvard, Princeton, UC Berkeley, and University of Michigan.

Similar programs at other UH campuses (if there is duplication, why is this program necessary):

There are no similar programs at other UH campuses. The school's existing DArch degree is currently the only NAAB accredited degree in the state. The DArch is distinct from the MArch through its inclusion of a multi-semester research component and practicum experience.

Statement from campus administration of new program's strategic value within the UH System and campus mission, and the Integrated Academic and Facilities Plan: The MArch will increase and diversify enrollment in keeping with the Systemwide Guiding Principle and Priorities. It will further advance the university's academic mission and improve opportunities to enhance the university's financial base. The MArch will also increase the university's standing and make UHM a more attractive site for graduate education, both in the MArch program and the designed and re-marketed DArch program. It will also encourage local students to complete their architectural education in Hawai'i.

Cost and resource allocation/reallocation implications:

The program can be offered at no additional cost. Students may be housed in the existing school building. Most courses offered in the curriculum will be shared with DArch students allowing efficiency and helping maintain larger class sizes. We anticipate that after launching the MArch that DArch enrollment will decrease but that total graduate architecture enrollment will remain about the same as in recent years. Through increased recruitment, total enrollment is expected to increase.

Impact of new program/program change request on campus budget allocations and mission priority:

The impact on campus budget allocations should be zero. The MArch program aligns the campus' mission by providing a shortened path to obtaining a NAAB accredited degree and subsequent licensure. This degree will be attractive to students from Hawai'i, many of which find the DArch program to be too long in duration.

ACTION RECOMMENDED:

It is respectfully recommended that the Board of Regents grant provisional status to the Master of Architecture (MArch) degree program in the School of Architecture at the University of Hawai'i at Mānoa.

Attachment: Proposal for Master of Architecture (MArch) degree program, [Approved of Authorization to Plan for the MArch Degree \(Appendix 1\)](#), Additional Appendix, [Resolution of Approval](#)

cc: Executive Administrator and Secretary of the Board Kendra Oishi
Interim Dean William R. Chapman

Master of Architecture (MArch) Proposal

University of Hawai‘i at Mānoa, School of Architecture 4/9/22

Guidelines for Proposals for New Academic Programs (15-Page Limit)

The program proposal for provisional status should follow the guidelines below. Programs are provisional for 150% of the proposed degree length. Once the college-level review has been completed, please submit the proposal and cover memo to April Goodwin at agoodwin@hawaii.edu.

I. Executive Summary

The School of Architecture (SOA) proposes a new Master of Architecture (MArch) degree. This degree would add to the three degrees currently offered at the SOA: The Bachelor of Environmental Design (BEnvD), The Master of Landscape Architecture (MLA), and The Doctor of Architecture (DArch). The BEnvD degree is termed a pre-professional degree and is not eligible for accreditation by the National Architectural Accrediting Board (NAAB). As such, the degree does not meet the educational qualification in most states for professional licensure. Both the MArch and DArch are termed professional degrees and are eligible for NAAB accreditation. Graduates holding an accredited MArch or DArch degree meet the educational qualification in all states for professional licensure.

The SOA’s DArch is the only NAAB accredited degree offered in the State of Hawai‘i. The degree requires 3 years of full-time study for students entering with a pre-professional bachelor’s degree, and 3.5 years for students entering with an unrelated bachelor’s degree. Therefore, BEnvD students need 3 years of additional graduate level study beyond the 4 undergraduate years, for a total of 7 years. Discussion with our students, local architects, and the SOA’s Dean’s Advisory Council has indicated the need to provide a NAAB accredited degree that can be completed in less than 7 total years. This is provided by the proposed MArch degree, which could be completed in 2 years beyond a pre-professional bachelor’s degree, for a total of 6 years. The topic has been the subject of four different Advisory Council meetings in 2018-19 and 2019-20; and all of those attending agreed that the MArch provided the best solution to the problems facing the profession and students currently in the program. There was universal agreement that the MArch would best serve Hawaii’s own students. The MArch would encourage more local students to complete a professional NAAB accredited degree and enter the professional workforce in Hawai‘i. The SOA faculty have voiced strong support for the implementation of the MArch program as outlined in this proposal.

Time to degree is important for many students, and we have found this to be especially true for our local students. There are very real cost and time implications for the 3 years needed to complete the DArch. Also, many students neither desire nor find necessary the additional year of the DArch, which is primarily devoted to the synergy of design and research. The SOA is currently the only program in the U.S. offering the DArch. While it fits well for a select group of students, it does not for others. We envision that with the addition of the MArch, a high percentage of Hawaii students will elect to choose this option, whereas U.S. and international students may opt for the DArch. Also, the DArch is essential for our Global Track program in which students receive a MArch from Tongji University, and a DArch from SOA/UHM. We project that by catering to different student needs we will meet the needs of employers and job-seeking graduates and increase overall SOA graduate enrollment.

The SOA has been actively developing an articulation for a BEnvD “2+2” program with Honolulu Community College. We anticipate this articulation would be in force around the time the first MArch program cohort has matriculated. This effort has been made to expand access to 4-year college education for Hawaii students, increase SOA enrollment in the BEnvD, and provide a pathway to the SOA’s graduate programs.

The MArch program will complement and expand the role of the SOA in professional education, serving the university and state workforce needs. It is also in keeping with the UH strategic plans, particularly in the role of providing sustainable design expertise and community leadership.

The proposed program will leverage existing SOA resources and collaborations to every extent possible. We expect that no new general funds will be needed to launch the program. We plan to share the majority of existing DArch and selected MLA courses and those of adjunct departments with the MArch program. It is expected that the program will attract many local as well as international/out-of-state applicants. The first BEnvD cohort graduated in 2016. Since then, an average of 32.8 BEnvD degrees have been awarded annually. Of these around 20 students apply and enter the DArch program. We estimate that once the MArch is in place a higher percentage of BEnvD graduates would opt for this program, and a lower percentage would elect to apply to the DArch program. However, a recent survey (see Appendix) of BEnvD students suggests that a higher percentage will actually decide to continue with graduate studies, thereby increasing the number of students in the MArch program. In the initial years, total graduate enrollment (MArch and DArch) would likely be about the same as recent years, with an increase in the numbers of MArch students and a decrease in DArch students. With increased marketing, however, we believe both programs could attract additional local, U.S., and international students. Students will apply and be admitted using the same procedures currently used for the DArch program. Applications are made to the UHM Graduate Division, and the SOA conducts a secondary review prior to admitting students.

The SOA has no departments and therefore no department chairs. The current administrative structure is comprised of a director for each program, i.e., Director of Undergraduate Programs (BEvD), Director of the DArch Program, and Director of the MLA Program. Each director is a faculty member given an 11-month appointment; the directors report to the Dean. A director would be named to head the MArch program, or the duties of the DArch program director would be expanded to include the MArch program, perhaps under the title of Director of Graduate Architecture Programs. The duties of the director of the MArch program would include: advising the Dean on temporary faculty hires and course assignments; conducting transfer credit evaluations; overseeing the Capstone Studio process; coordinating program assessment; and leading WASC and NAAB accreditation efforts.

The proposed MArch curriculum closely follows the courses and sequence in the first two years of the DArch program with strengthened advanced professional practice. This provides economy and efficiency in that it reduces the number of SOA courses needing to be taught, helps ensure sufficient enrollment in courses, and allows for an interactive mix of MArch and DArch students in many classes. The curriculum has been compared with other leading and peer U.S. programs, and has been evaluated to ensure it can meet NAAB requirements. It should be noted that the DArch program received a NAAB accreditation review in 2018 and received the maximum reaccreditation term of 8 years. The MArch curriculum includes courses in appropriate areas, including design studio, professional, technical, history/theory, and electives. Design studio courses form the core of the curriculum, and a studio course is taken each semester, including the Capstone Studio taken in the final semester. This proposal was reviewed by the SOA Curriculum Committee and was approved by the SOA Faculty Senate on April 9, 2021.

All classes and other activities take place in the SOA building. Studio classes consume the majority of space given that all graduate students are given a dedicated workspace. This follows the typical practice for U.S. architecture programs. The SOA building has the capacity to house around 80 additional students over the current total enrollment, for a total of approximately 400 students in all undergraduate and graduate programs. We anticipate the total graduate student enrollment will stay the same or increase slightly during the first years of the MArch program. With additional marketing of both the MArch and DArch, we expect to increase total enrollment. Our objective is to increase graduate enrollment while at the same time increasing student quality through more selective admissions policies.

II. Program Purpose and Outcomes

- *Why is this program a priority for the unit? Describe how the program will meet the needs of students, the local community, and the state. Include a market analysis detailing the how the program will respond to the social, economic and workforce needs of the nation and state.*

Adding a MArch degree program is a priority for the SOA in that it will: (1) Better meet the needs of students who seek to obtain a professional degree, enter the workforce in a reasonable time period, and obtain a professional license, (2) Provide a professional degree tailored to the needs of students in advanced architectural practice, (3) Increase SOA enrollment and resulting tuition revenue, and (4) address the needs of Hawaii students and the local profession for qualified entry-level employees.

According to the study Long-Term Occupational Projections, State of Hawai‘i, 2018-2028, architectural positions in Hawai‘i are forecasted to increase from 990 to 1,030, or 4%. With regard to demand at the national level, NCARB’s 2018 article Architects on Rise, states, “The health of the architecture profession is even more apparent when compared to the U.S. population: the number of architects licensed in the United States has risen over 10 percent since 2008, while the total U.S. population has risen 8 percent, according to data from the U.S. Census Bureau.”

This summary indicates that UHM is unique in its professional DArch program but unusual in not offering a professional degree at the master’s or bachelor-degree level. It also indicates that demand for architects is expected to increase over the coming years. While the School of Architecture intends to retain the DArch by highlighting its combination of design research and practice, the school believes that the MArch degree would be instrumental in serving the needs and interests in advanced architectural practice of many of our undergraduate students, as well as providing a point of entry to students with preprofessional degrees from other institutions.

Although experience can be the principal factor in pay scales in the private sector, a graduate degree strengthens a professional’s credentials. This is especially important when seeking a promotion and rising through the ranks of any firm. For government jobs, a graduate degree will qualify an applicant to begin at a higher step rating, as this is considered a highly desirable qualification.

Discussions with individual undergraduate students and groups of students indicate that local students in particular are cognizant of the significant investment of time and money when their career objective is to obtain a professional degree to prepare them to enter practice. Anecdotal and survey information (see Appendix) suggests that some BEnvD students would be more likely to continue onto the master’s level if this could be completed in 2 years.

- *Describe how the program aligns with the UH academic master plan and strategic priorities.*

There are currently no professional Master of Architecture (MArch) degree programs offered in the State of Hawaii. The MArch is distinct from the DArch in that it focuses on advanced architectural practice and its application. The proposed MArch program aligns with the Campus and UH system mission. The SOA is committed to becoming a Hawaiian place of learning. The program will provide graduates that serve the community by their designing and building sustainable and humane environments, improving the quality of life for the people of Hawai‘i and beyond. We reach out to diverse student bodies, including Native Hawaiians, international students, and in/out-state students and guide them to engage in the inquiry and experimentation of advanced architectural practice to enhance the value, relevance, and effectiveness of living and community building within our built and natural environments. The MArch program will be housed in the existing SOA building on the Manoa campus. This location provides significant access to other departments to facilitate multi-disciplinary research and learning, thereby aligning with the recommendations in the Integrated Academic and Facilities Plan.

- *Provide evidence of the need for the program including projected number of students and graduates, career and graduate education opportunities, etc.*

In the U.S., three degrees are eligible to be accredited by the specialized accreditation body, the National Architectural Accrediting Board (NAAB): (1) The Bachelor of Architecture (BArch) - a 5-year degree open to students with the minimum of a high school diploma, (2) The Master of Architecture - a 2-3 year degree open to students with the minimum of an architecture pre-professional degree, or a baccalaureate degree in any field, (3) The Doctor of Architecture (DArch) – a 3-3.5 year degree open to students with the minimum of an architecture pre-professional degree, or a baccalaureate degree in any field. These three degrees are termed “professional degrees” and are distinguished from pre-professional degrees – 4-year baccalaureate degrees (BA, BS, or AB) having titles such as “Environmental Design”, “Architectural Design”, or “Architecture Studies”. Pre-professional degrees are not eligible for NAAB accreditation. According to the National Council of Architectural Registration Boards (NCARB), “Most of the 55 U.S. licensing boards require that architects hold a professional degree for a NAAB-accredited program to satisfy the educational requirement for certification.” Initial NAAB accreditation may be sought after a first cohort of students graduate from the proposed MArch program. Once accredited status is granted, it is applied retroactively to cover the first cohort of students. According to the 2019 NAAB Annual Report, there were 168 accredited programs in 139 institutions. Of the 168 programs, 112 (62%) are Master of Architecture programs, 55 (30%) are Bachelor of Architecture programs, and 1 (1%) is a Doctor of Architecture program.

As noted above, the majority of U.S. state architectural registration boards mandate that applicants for licensure hold an NAAB accredited degree. Hawai‘i is one of the few states that have an exception to this rule. According to the State of Hawaii Board of Engineers, Architects, Land Surveyors, and Landscape Architects, applicants for licensure may apply for licensure without an NAAB accredited degree. For example, holders of a 4-year pre-professional degree are required to accrue 5 years of lawful experience. This contrasts with 3 years of lawful experience required of professional degree (BArch, MArch, or DArch) holders. For additional information on Hawai‘i state requirements see Appendix). In addition, students enrolled in a NAAB accredited program may accrue lawful experience (Architectural Experience Program or AXP credits – as monitored by the National Council of Architectural Registration Boards or NCARB). Completion of lawful experience requirements is a prerequisite for taking the Architect Registration Examination or A.R.E. Therefore, while an individual may elect to pursue licensure in Hawaii without a NAAB accredited degree (such as the SOA’s BEnvD), they will need more time to become a registered architect than those holding an NAAB accredited degree. Also, in most cases non-NAAB degree holders will typically be paid lower wages during their internship period. Finally,

those without a NAAB accredited degree will face hurdles should they wish to gain reciprocity and practice in any of the states which require a NAAB accredited degree.

The SOA currently offers the pre-professional Bachelor of Environmental Design (BEnvD), the professional Doctor of Architecture (DArch), and the professional Master of Landscape Architecture (MLA). The Doctor of Architecture (DArch) consists of the combination of advanced practice and research components. For students with an interest and aptitude to focus on architectural practice with professional studies, the MArch has become an instrumental degree not only with the content but also with the shortened duration of the study.

From a career perspective, the MArch degree has become the usual entry degree for those entering the profession of architecture. The master's degree also places students in a higher employment category—especially for government jobs—than students holding a bachelor's or a professional BArch degree.

The SOA intends to retain the DArch program. The DArch would continue to offer both an alternative and an additional possible educational track for students holding pre-professional degrees or degrees unrelated to architecture. By offering both the MArch and DArch, the school will be able to cater to students having differing educational and career objectives. MArch students will typically enter the profession and seek to practice as licensed architects. DArch students may similarly engage in professional practice. However, due to their additional research background and specialization, they may also conduct research within the context of practice, and/or teach, consult, or work for NGOs or government. In addition, students holding a professional degree would be able to pursue specialized research interests in a new post-professional doctoral level degree. This degree is currently undergoing initial planning. In addition to its benefit to the research-oriented students, a post-professional doctoral level degree program will provide a lifelong education opportunity for the population who already have professional experience and look for developing the second cycle of life.

The SOA also intends to re-market the DArch for: 1) students lacking a pre-professional degree and those wishing to join our Global Track (GT) program, and 2) international students who already have MArch degrees and wish to pursue a DArch degree accredited in the US. The Global Track (GT) program will extend its collaboration to various international institutions. For example, the current China GT program is a dual degree offering in partnership with Tongji University in Shanghai, China. This program provides an opportunity for U.S. and other international students to obtain a DArch at UHM and a separate MArch from Tongji (In reverse, the Tongji students obtain their professional MArch from Tongji and the DArch from Hawai'i.). This unique offering has given the Chinese students an opportunity to obtain a higher research degree with which they are able to enter government service, private practice, or academia. American and other international students gain both the unique DArch degree and a second graduate degree from one of the most prestigious institutions in Asia. We also intend to establish other similar dual degree GT programs with other foreign universities, and to thereby increase DArch program enrollment.

The SOA plans to undertake aggressive student recruitment efforts both locally and internationally to increase graduate enrollment. We project that a higher percentage of our BEnvD graduates will elect to enter the MArch program. Therefore, DArch program enrollment will be augmented by: 1) the recruitment of pre-professional and unrelated degree holders both in US and other countries, 2) the recruitment of U.S. and international students holding a bachelor's degree in a field unrelated to architecture, 3) the growth of Global Track enrollment and by U.S. mainland and international student enrollment. In keeping with the SOA and UH mission we intend to give particular emphasis on recruiting students from Asia and the Pacific. As an example of one such recent effort, the SOA/UH recently signed

an agreement for a 2+2 program with Hoa Sen University in Ho Chi Minh City, Vietnam. The program will bring students to the SOA to complete the last two years of their BEnvD. It is expected that some of these students will continue on in the DArch program or the MArch program.

Discussion with the SOA's Dean's Advisory Council and with the local and national professional architectural community has provided additional evidence of the need for a professional MArch degree. The industry is clear that what it needs is well trained professional architects with a solid grounding in architectural practice. The increased number of projects in Hawai'i will require more architecture professionals. The MArch degree will become another option for the residents of the state of Hawai'i to prepare for licensure. In addition, the location of Hawaii and its focus on the Asia Pacific region bode well for graduates pursuing architectural work abroad. Asia is experiencing a major building boom, and architects - particularly foreign architects - are in high demand. In addition, many Asian students are especially interested in obtaining a foreign graduate level degree. They see that such a degree will offer them distinction and lead to their career advancement in industry, government, and academia.

The typical path for a MArch graduate is to obtain employment in an architectural firm, accrue needed internship credits, and pass the Architectural Registration Exam (A.R.E) to become a licensed architect. Graduates can also find employment with companies related to the design of the built environment, such as consulting engineers, contractors, landscape architects, and planners. They could also work for state or federal agencies regulating planning and construction activity.

We project student enrollment in the MArch program to be approximately 30 students after year three of the program, with around 12 students graduating each year. These percentages are based on a survey to SOA students conducted in November 2020 (see Appendix). Since the MArch program is a graduate level program, the vast majority of students will take this as a terminal degree and enter the professional workforce. It is of course possible that some students may elect to obtain another graduate degree in a related or unrelated field at UH or another university. The SOA considering offering a post-professional doctoral degree. Should such a degree be proposed and approved it would allow MArch students to continue their studies at the SOA.

The BEnvD recently underwent Academic Program Review for Provisional to Established status. The review team's report indicated, "...the BEnvD program articulates well with professional graduate degrees already offered in the School of Architecture including...3-year Doctor of Architecture (D.Arch.) degree. The proposed 2-year Master of Architecture would provide an even more efficient path to licensure." In the report's final recommendations, it was noted, "Create a Master of Architecture (M.Arch.) Degree to provide BEnvD students with a more efficient pathway to professional licensure in architecture."

- *Describe the profile of students who will likely enroll in the program and provide evidence of student demand (i.e. needs assessment).*

The Association of Collegiate Schools of Architecture (ACSA) provides a useful overview of programs in the United States, setting out degrees, enrollments, and admissions standards. The University of Hawai'i's undergraduate pre-professional BEnvD program is one of 74 pre-professional degrees in public universities, and one of 105 in all. Only 57 colleges and universities maintain a BArch undergraduate professional degree; of these only 27 are in public universities. The MArch degree is the first professional degree at 82 public universities and institutions and 46 private colleges and universities, for a total of 126, compared to 57 with BArch degrees. Hawai'i offers the only professional DArch degree.

A typical student enrolling in the program would hold a pre-professional degree and be seeking to obtain a graduate-level NAAB accredited professional degree which is the educational qualification for professional licensure. A high percentage of students enrolling would be our own BEnvD graduates, particularly during the early years of the MArch program. In polling our BEnvD students (see Appendix), 69.2% of respondents indicated they would be likely or very likely to apply to a MArch program should it be offered at the SOA. With increased marketing and recruitment efforts, it is expected that an increased percentage of students from one of the 74 U.S. programs offering a pre-professional degree would enroll. We believe the MArch will meet the demands of local students and the design industry.

- *Includes an enrollment and completion estimates with an explanation on how these number was derived.*
- Please complete tables 1 and 2 below.

Table 1. Enrollment Projects: Provisional Years

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Current Year
Projected Enrollment	15	25	30	30	30	30	0

Table 2. Program Completion Projection

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Current Year
Projected Program Completion (annual)	0	10	12	12	12	12	0

III. Program Organization

- *Provide a description of curriculum organization, total credits to complete the program including all prerequisites requirements, admission policies, advising, and other aspects of the program, with reference to its goals/outcomes. Provide additional justification if the program is more than 120 credits (bachelor’s).*

The proposed MArch program is planned as a NAAB accredited, 60-credit professional architecture program to be housed in UHM SOA, where it can build upon, strengthen, and broaden the focus of existing resources. The MArch program will add a new degree option to the school’s existing pre-professional (non-NAAB accredited) Bachelor of Environmental Design (BEnvD) program, the professional Master of Landscape Architecture (MLA) program, and the professional, NAAB accredited Doctor of Architecture (DArch) program.

Admissions Policies

The program will admit students holding pre-professional architecture degrees and professional BArch degrees. Students holding a bachelor’s degree in a field unrelated to design of the built environment would have the option of applying to the SOA’s DArch program or Master of Landscape Architecture (MLA) program. The admissions process would mirror what is currently in place for the DArch program. Admissions procedures for the planned MArch program will follow general UHM Graduate Division policy. In addition,

MArch specific requirements and admissions policies will be closely aligned with established School of Architecture practices for the professional Doctor of Architecture program (DArch).

Admissions to the MArch program will be Fall only with a January 1 application deadline. Applicants will need to demonstrate a GPA of 3.0 or above for undergraduate course work and for any post-baccalaureate or graduate course work. Standardized exam and English proficiency requirements will be in accordance with UHM Graduate Division rules. Initially, applicants will not be required to submit GRE scores. This practice will be evaluated a few years into the operation of the program. Minimum TOEFL score for international applicants: 61 (internet) or 500 (paper) or minimum IELTS score for international MLA applicants: 6.00 for the overall band test results.

Because the number of qualified applicants is expected to exceed the number of spaces available, admission will be competitive. Meeting minimum admissions standards will not guarantee admission.

Advising

Academic advising for the MArch program will follow procedures currently employed in the DArch program. These have been found to be effective and meet NAAB requirements. Effective MArch student advising will address academic development, career development, professional opportunities, advanced educational opportunities, licensure requirements, as well as continuing education requirements associated with professional practice. Academic advising tasks will be distributed among the SOA's Director of Student and Academic Services and the MArch program director. Upon admission into the program, MArch students will meet and work individually with the MArch program director to go over program requirements and the recommended sequence of courses. Subsequently, MArch students will meet on a regular basis with the Director of Student Services who will work with students to keep on track toward their degrees, navigating the system, offering assistance with curricular and registration-related questions and procedural documents, performing degree checks, etc. Students will also be encouraged to meet with faculty to discuss various aspects related to their educational goals, ideas for capstone project topics, professional/career opportunities, licensure procedures, contacts with the professional community, etc. The MArch program director, as the program's liaison with the UHM Graduate Division, in close coordination with the Dean, and Director of Student and Academic Services, will oversee academic advising and students' advancement from admission to graduation. The MArch program director will maintain the integrity of the program and degree by upholding program-related policies and procedures. The Director of Student and Academic Services will oversee students' progress toward their degree and will further support and promote the scheduling of regular advising meetings for all MArch students. The MArch program director will have signing authority for MArch program-related documents and will review and approve all student forms that require a signature.

Curriculum

On April 9, 2021, the School of Architecture's curriculum committee approved the proposed program of study for the new MArch program, stating, "[A] motion to approve the MArch program proposal draft dated April 6, 2021 with the understanding that parts in yellow, UH forms and specificities of courses will be adjusted as necessary in the future was discussed and unanimously approved by the committee."

Subsequently, on 4/9/21, the Architecture Faculty Senate approved the MArch program proposal.

In an effort to operate as efficiently as possible, the proposed program leverages existing curricular School of Architecture and campus resources and collaborations to every extent possible. Incorporating and/or cross-listing existing relevant courses avoids the duplication of course content, stimulates transdisciplinary faculty/student interactions, and strengthens existing options and concentrations in allied programs and fields. The chart below titled "Master of Architecture with Pre-Professional Degree" (below) illustrates how the MArch curriculum is organized.

Master of Architecture (MArch) with Pre-Professional Degree

student name

ID or username

entry semester

SEM / YEAR		DESIGN & RESEARCH		TECHNOLOGY		PRACTICE	HISTORY / THEORY	120 UNDERGRADUATE CREDITS	
								ELECTIVES	CRDS
Year 1	Fall	ARCH 742 [6] Arch Studio III: Complex Building	ARCH 733 [3] Advanced Design Com II	ARCH 723 [3] Arch Sys II: Qual Bio Struct Perform			ARCH 715 [3] Asia-Pacific Arch History & Theory		15
	PRE-REQ						<i>DArch Major</i>		
Year 1	Spring	ARCH 743 [6] Arch Studio IV: Urban Design	ARCH 739 [3] Research Methods	ARCH 724 [3] Arch Sys III: Qual Struct Anal & Design	ARCH 725 [3] Arch Sys IV: Environ Tech, Sust & Anal				15
	PRE-REQ	<i>Arch 742, 733</i>	<i>Arch 715</i>	<i>Arch 723</i>	<i>Arch 723</i>				
Year 2	Fall	ARCH 744 [6] Comprehensive Studio			ARCH 726 [3] Systems V: Integration	ARCH 745 [3] Advanced Professional Practice	ARCH 716 [3] Arch & Urban Design Theory		15
	PRE-REQ	<i>Arch 726 concurrent; Arch 724, 725, 743</i>			<i>Arch 744 concurrent; Arch 724, 725, 733, 744</i>	<i>Arch 739, 743</i>			
Year 2	Spring	ARCH 783D [6] <i>MArch Capstone Studio</i>	ARCH 783R [3] <i>MArch Capstone Research</i>				ARCH 6xx [3] Arch Elective	ARCH 6xx [3] Arch Elective	15
	PRE-REQ	<i>Arch 744</i>	<i>Arch 785A concurrent;</i>						
TOTAL									60

Notes:

1) New SOA courses specific to the MArch program are italicized.

Degree Requirements

General degree requirements for the MArch program are set forth by the UHM Graduate Division policy. MArch -specific degree requirements are:

MArch core requirements [45 credits]:

- ARCH 715 [3] Asia-Pacific Architectural History and Theory
- ARCH 716 [3] Architecture and Urban Design Theory
- ARCH 723 [3] Architecture Systems II: Qualitative Bioclimatic and Structural Performance
- ARCH 724 [3] Architecture Systems III: Quantitative Structural Analysis and Design
- ARCH 725 [3] Architecture Systems IV: Environmental Technology, Sustainability, and Analysis
- ARCH 726 [3] Architecture Systems V: Building Systems Integration
- ARCH 733 [3] Advanced Design Communication II
- ARCH 739 [3] Research Methods Seminar
- ARCH 742 [6] Architecture Studio III
- ARCH 743 [6] Architecture Studio IV: Urban Design
- ARCH 744 [6] Architecture Studio V: Comprehensive Design
- ARCH 745 [3] Advanced Practice

Required electives [6 credits]:

- ARCH 6XX [3]
- ARCH 6XX [3]

Capstone [9 credits]

- ARCH 783D [6] *MArch Capstone Studio: Design*
- ARCH 783R [3] *MArch Capstone Studio: Research*

MArch total: 60 credits

In order for the SOA to be able to implement this new program without requesting additional resources, the majority of courses in the MArch program will utilize existing DArch courses, with a mix of MArch and DArch students enrolled in these same courses.

SOA Programs Synergy

Besides offering economy and efficiency, the sharing of courses between the MArch, DArch, and MLA programs provides opportunities for cross-disciplinary collaboration and exchange. It also serves to promote unity, communication, and understanding among the SOA community.

Cooperative Arrangements

The MArch curriculum leaves room, mainly through its electives, for potential additional cross-listed courses with the Department of Urban and Regional Planning (DURP) programs well as other UH Mānoa departments such as Geography, Civil Engineering, Art, etc.

Accreditation

To ensure that the MArch program will be able to achieve a successful initial NAAB accreditation, the curriculum has been compared to other current accredited MArch programs, and a NAAB matrix of courses has been completed showing the NAAB Student Criteria (SC) and Program Criteria (PC). This matrix is shown below. The required courses in sum cover the needed criteria. It should be noted that NAAB uses the same Student Criteria and Program Criteria for the MArch and the DArch.

- Describe provisions for articulation with UHCCs.

The MArch is a graduate program and would not therefore have a direct articulation with the UHCCs.

- Attach (in appendix) relevant program/academic plans.
- Please complete Table 3 below.

Table 3. Anticipated Courses, Sections, SSH

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Current Year
Number of new courses offered	2	0	0	0	0	0	0
Number of new sections offered	4	0	0	0	0	0	0
Annual SSH	360	0	0	0	0	0	0

IV. Program Resources and Efficiency

- What operating and instructional resources will the program need and where will they come from? What are the program’s facility needs?
- What are the risks associated with this program?

It is anticipated, that at least for the beginning years of the MArch program, no additional permanent faculty will need to be hired. Should enrollment increase beyond the steady state enrollment of around 30 students in years 3- 6 (See Table 1), additional faculty (lecturers or permanent faculty) will be needed as instructors for the additional Capstone Studio and Capstone Research course sections. These sections may be taught by permanent faculty should new faculty lines be approved by the university, or by reallocating courses assigned

to permanent faculty. It would also be possible to have lecturers teach one or more of these sections. As a professional program, the MArch seeks to find an appropriate balance between permanent faculty and lecturers. It is typical for architecture programs to employ a relatively high percentage of lecturers as they serve to forge relationships with the professional community and allow students exposure to current issues in the practice of architecture. The integration of the MArch into the overall curriculum structure of the SOA will take approximately 2 to 3 years. During this period, enrollment fluctuations in the MArch and DArch programs will be expected.

Support Personnel

The School of Architecture Student Services Office, through its Director of Student and Academic Services and other staff, will provide MArch support in student advising, admissions, communications with UHM Graduate Division, curricular matters, and degree administration. Office of the Dean staff, such as the SOA's Administrative Office, will continue to provide MArch -related HR and funds management support. Further, the school's directors of Digital Media/IT Lab and Fabrication Shop and their student staff members will support MArch student and faculty needs. Thus, no additional staff will be needed during MArch program implementation. As the School of Architecture faculty and student body continues to grow, however, additional pressure will be placed on administrative and staff resources. Once the MArch has been established, with sufficient and growing enrollment/revenue, additional staff support may be needed.

Library Requirements

The UH Mānoa Library holds a significant number of basic architectural resources in digital and print formats. The school also has book and periodical holdings in the John and Maria Lynn Reading Room which is housed in the SOA building. These resources have proven to be adequate for all NAAB reaccreditation visits for the DArch program. Because the requirements for library resources are the same for MArch and DArch programs, we are confident that this requirement will be sufficient for initial accreditation of the March program.

Supplies and Equipment

The MArch program will take advantage of existing School of Architecture supplies and equipment. In the event that additional equipment is needed for the establishment of the program, we will use differential tuition revenue and/or existing expendable gift accounts to help fund the expenses.

Physical Resources/ Facilities

During the first years of program establishment, existing School of Architecture spaces will be sufficient to accommodate incoming MArch classes. School of Architecture classrooms and teaching spaces are appropriate for lecture courses and seminars and general-purpose classrooms can be used for lecture courses. Dedicated studio spaces should also be adequate. However, should the total SOA student enrollment increase in the future, additional space will be needed. Such possible growth may result in an increase beyond the MArch steady state projection or other new programs.

Students in the proposed MArch program will use the School of Architecture's Digital Fabrication Services lab (room 207) for scanning, printing, laser-cutting, and 3D printing, as well as the Fabrication Workshop (room 104/105) for woodworking and CNC milling. As the program matures, we will seek to augment and update physical resources and equipment to accommodate the needs of MArch students. SOA student professional fees will help fund these additions and improvements. The SOA's existing facilities have proven adequate to meet DArch NAAB accreditation and are deemed adequate to meet initial MArch accreditation standards.

- *What impact will developing this program have on resource (re)allocation in the unit?*

Funding

No additional resources are expected in the early years of the program. As noted above, should enrollment in the program grow, new faculty and additional space may be needed. In this case, additional tuition revenue is expected to cover the increased expense. The SOA has one approved replacement position now on hold due to the hiring freeze and another retirement that will need refilling. Otherwise, the MArch program will depend on existing faculty (12.75 FTE) and our pool of lecturers from the professional community. The program will not require any new faculty members other than those to be replaced once the hiring freeze ends. For maximum efficiency, relevant existing DArch, and MLA courses will be incorporated in the proposed MArch curriculum and lecturers from the professional field will be utilized. As it is common practice in other, established MArch programs, some courses are more appropriately taught by local professionals hired as lecturers. If needed with increased enrollment in future years, it is expected that any additional FTE and/or lecturer costs required will be covered through the reallocation of internal resources (e.g. teaching assignments, course development, and cross-listing required coursework); and through future strategic recruitment for open faculty positions. No new general funds will be needed to launch the program.

Cost Comparison with Other Programs

Average class sizes for required MArch design studio courses are expected to be equivalent to the sizes of existing studio courses in our professional DArch program (6-15 students). The addition of MArch students will increase enrollment in these existing studio and lecture courses and thus make them more financially viable. The same is true for existing graduate-level DArch courses that will be MLA requirements (ARCH/PH 682, ARCH 695, ARCH 739, ARCH 743, ARCH 690). The addition of MLA and DArch students will make these courses more efficient in terms of their student/instructor ratio. The remaining MArch lecture and capstone courses will be comparable in size to those in other relatively small professional programs such as the Master of Urban and Regional Planning (MUR) or the DArch.

List similar programs that currently exist in the UH system. Describe how this program compares and provide a justification for a new program in this field.

No MArch degree or similar programs exist in the UH System or in the state with the exception of the DArch which is offered by the SOA. The MArch and DArch are both subject to specialized NAAB accreditation. The MArch is distinguished from the DArch in that it requires less time to complete and has fewer research requirements.

- *Has there been consultation at the program level between campuses and within the originating campus? Please provide documentation of who was consulted, in what capacity, and when? Provide a summary of the results of the consultation.*
- *Please complete tables 4-6 below.*

Table 4. Existing Resources and Funding

Existing Resources	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Current Year
Combined Tuition/Summer/Course	45,890	62,780	92,670	97,000	102,000	107,000	0
Projected Fees	15,000	25,000	30,000	30,000	30,000	30,000	0

Table 5. Anticipated Personnel and Operating Costs*

Personnel	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Current Year
Full-time Faculty	0	0	0	0	0		0
Lecturers	1	2	2	2	2	2	0
Instructional Costs	13,268	27,066	27,608	28,436	29,289	30,168	0
Other	0	0	0	0	0	0	0
TOTAL COSTS	155,891	306,752	312,887	322,273	331,942	341,900	0

Faculty Costs*	0	0	0	0	0	0	0
Lecturer Costs	13,268	27,066	27,608	28,436	29,289	30,168	0

*Faculty costs are covered by General Funds and are listed here only for proportional comparison with the school's other programs. No new positions will be required.

Table 6. Anticipated Operating Costs**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Current Year
Unique Projected Operating Costs (from Provisional proposal)**	0	0	0	0	0	0	0

**There are no unique equipment and purchases or other program costs for the MArch program. Equipment purchases are paid for using RCUH funds.

V. Program Effectiveness

- Briefly describe (one paragraph or less) the plan for assessing the quality of student learning.
- Identify relevant program accreditation and plans to meet accreditation requirements.

The NAAB Student Criteria (SC) and Mānoa Advanced Degree Learning Objectives (ILO) will be included in all required MArch course syllabi. Please refer to the UHM-1 forms and supporting materials (justifications and generic syllabi) for new MArch courses in the Appendix for examples. Admission of applicants into the MArch program acknowledges student competency and varying levels of preparedness. As is common practice in professional design degree programs, the evaluation of students during their final studio presentations by invited professionals as well as the participation of outside committee members (experienced professionals) on capstone committees and juries will play important roles in the assessment of MArch learning at various stages throughout the program (also see curriculum map). Additionally, as has been a long-standing and successful tradition in the school's NAAB-accredited DArch program, at the end of each semester, SOA program faculty engage in an all-faculty review of the semester's program course work, specifically design studio work. During this assessment session, all SOA faculty and the Dean gather for one day and evaluate/discuss how studio courses and the overall program curriculum might be adjusted to better

align course content with NAAB SC criteria and improve overall program learning outcomes. NAAB Criteria and how they are mapped to the MArch curriculum is shown in the Appendix.

Program Accreditation and Plans to Meet Accreditation Requirements

The proposed MArch will seek NAAB accreditation candidacy status during the first and second year of program operation (application for candidacy status during first year of MArch operation; NAAB candidacy team visit and review during the second year). Candidacy is an accreditation classification granted to a program that is in the early stages of development or an intermediate stage of program implementation. Upon graduation of its first MArch class the program will apply for initial NAAB accreditation. NAAB accreditation for the program, once granted, will be retroactive and include the first graduating class.

Throughout this program proposal we have highlighted important NAAB accreditation criteria and how they relate to the MArch program outcomes, curricular and administrative organization, resources, and assessment. The SOA administration and faculty possess a wealth of experience with NAAB program accreditation. The School of Architecture's administration and faculty are well prepared to undertake the upcoming MArch accreditation candidacy and initial accreditation applications. At the time of the submission of this proposal, pending program approval, the school already meets all criteria necessary for a NAAB accreditation candidacy status application. The proposed MArch degree is not expected to interfere with the School's NAAB accreditation of its DArch program) or UH Mānoa's accreditation by the Western Association of Schools and Colleges (WASC). NAAB recognizes WASC as a regional accreditation agency.

B. NAAB Criteria (2020 Edition) and Curriculum Map

3.1 Program Criteria (PC)

A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.

PC.1 Career Paths—How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline’s skills and knowledge.

PC.2 Design—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

PC.3 Ecological Knowledge and Responsibility—How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

PC.4 History and Theory—How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

PC.5 Research and Innovation—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

PC.6 Leadership and Collaboration—How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

PC.7 Learning and Teaching Culture—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

PC.8 Social Equity and Inclusion—How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

3.2 Student Criteria (SC): Student Learning Objectives and Outcomes

A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

SC.1 Health, Safety, and Welfare in the Built Environment—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

SC.2 Professional Practice—How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

SC.3 Regulatory Context—How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in

the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

SC.4 Technical Knowledge—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

SC.5 Design Synthesis—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

SC.6 Building Integration—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

NAAB Criteria Curriculum Map

The following matrix (curriculum map) illustrates the alignment of instruction with NAAB Program Criteria (PC) and Student Criteria (SC) throughout the proposed MArch curriculum. Individual course syllabi specify the NAAB SC assigned to each course.

MASTER OF ARCHITECTURE

AlphaNo	Cr	Courses	Program and Student Criteria														
		A - Ability U- Understanding										U	U	U	U	A	A
			PC.1 Career Paths	PC.2 Design	PC.3 Ecological Knowledge and Responsibility	PC.4 History and Theory	PC.5 Research and Innovation	PC.6 Leadership and Collaboration	PC.7 Learning and Teaching Culture	PC.8 Social Equity and Inclusion	SC.1 Health, Safety, and Welfare in the Built Environment	SC.2 Professional Practice	SC.3 Regulatory Context	SC.4 Technical Knowledge	SC.5 Design Synthesis	SC.6 Building Integration	
			Program Criteria								Student Criteria						
		MArch REQUIRED COURSES															
ARCH 715	3	Asia-Pacific Architectural History and Theory				x				x							
ARCH 716	3	Architecture and Urban Design Theory				x	x			x	x						
ARCH 722	3	(Bootcamp) Architecture Systems I: Introduction to Systems		x	x						x			x			
ARCH 723	3	Arch Sys II: Qualitative Bioclimatic Structural Performance			x						x			x			
ARCH 724	3	Arch Sys III: Quantitative Structural Analysis and Design		x							x			x			
ARCH 725	3	Arch Sys IV: Environmental Technology, Sustainability, and Analysis			x						x			x			
ARCH 726	3	Architecture Systems V: Building Systems Integration						x			x			x	x	x	
ARCH 731	3	(Bootcamp) Advanced Design Communication I		x				x									
ARCH 733	3	Advanced Design Communication II		x				x						x			
ARCH 739	3	Research Methods Seminar						x	x		x						
ARCH 742	6	Architecture Studio III: Complex Buildings		x				x			x		x		x		
ARCH 743	6	Architecture Studio IV: Urban Design				x		x		x			x	x	x		
ARCH 744	6	Architecture Studio V: Comprehensive Design		x	x			x				x	x	x	x	x	x
ARCH 745	3	Advanced Practice	x					x				x	x				
ARCH 765	6	Capstone Design Studio	x	x	x						x	x	x	x	x	x	x
ARCH 766	3	Capstone Design Research			x	x	x										

C. 2020 MArch Program Interest Survey & Results

3/8/2021

MArch Survey - Google Forms



MArch Survey

Questions Responses 14

14 responses



Accepting responses

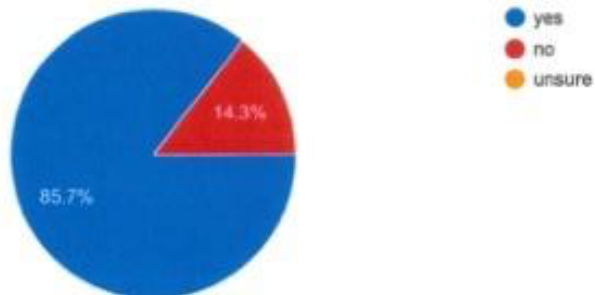
Summary

Question

Individual

If a 2-year MArch had been available at the time you applied to the DArch, would you have chosen the MArch over the DArch?

14 responses



If yes, why?

12 responses

Because it is a shorter program which mean less money spent. Assuming it's a professional degree like the DArch. As well as it is more understood in the professional world

A 3-year commitment is a difficult decision to make for a student under financial and academic pressure. With Hawaii being the only school in the country offering a D.Arch, it is hard to compare the program and the degree's standing to all other architecture schools in the U.S and for mainland employers to compare as well. I believe more of my undergrad classmates would have enrolled in grad school if the program was shorter, or if the AXP opportunities within the D.Arch program was longer (2 semesters-whether joined or separate).

I think given the opportunity to graduate with an MArch will allow me to still acquire an accredited professional degree and help me to start exploring firms at a much earlier time. Financially, this is also a more appealing option as tuition is not always easy to come by each semester. Although the opportunity to research and develop a thesis is not available for those pursuing the MArch, I think it at least allows students to experience professional education and get us working in firms sooner.

I would like to start practicing ASAP. Having the possibility of becoming a professor with the DArch is great, but the structure of the MArch and DArch sound very similar. If I could get an accredited degree a year earlier and get my license a year earlier. I definitely would've chosen the MArch.

If no, why not?

2 responses

As GT student I find more value in having distinguished levels of both a masters and doctorate degree as part of the program. I don't think it'd be as valuable to simply have dual masters degrees (if GT would even be available in a two year program). To be honest if UH offered an M.Arch instead of D.Arch I would've chosen to study elsewhere for graduate school.

The DArch program represents a proof of understanding of critical research and design. This program is not about designing in the present but pushing forward and the boundaries of design in the future of the Asia-Pacific region. However, I see the benefits of a two year program for those who wish to affect the present and immediate future rather than the next step in the human environmental design.



BEnvD Student Survey_Fall 2020

Questions Responses 65

65 responses



Accepting responses

Summary

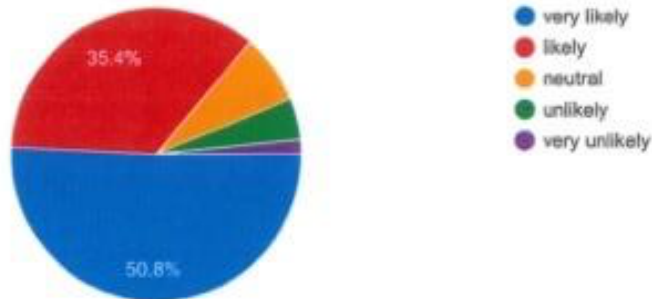
Question

Individual

Employment after graduation with the BEnvD

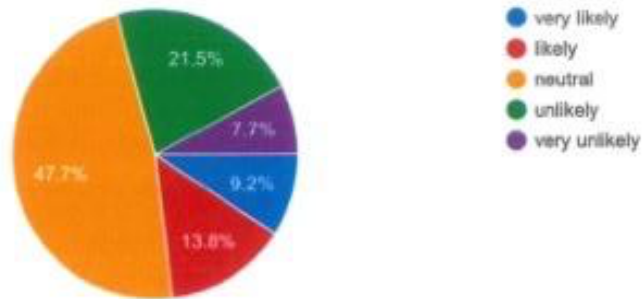
1. Do you plan to find employment in an architecture firm?

65 responses



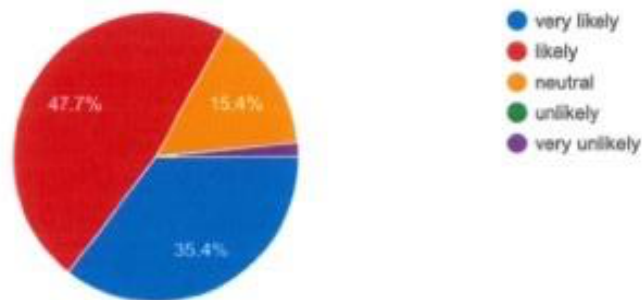
2. Do you plan to find employment in a landscape architecture firm?

65 responses



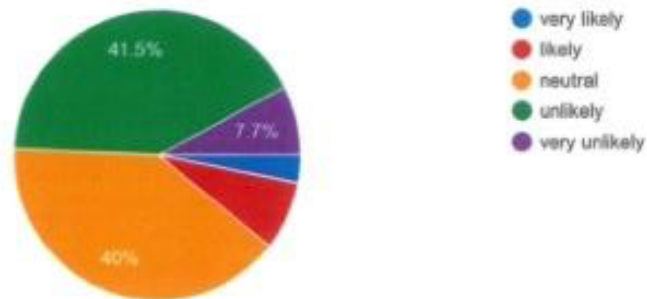
3. Do you plan to find employment in a company or organization involved in design/development of the built environment?

65 responses



4. Do you plan to find employment in a company or organization unrelated to the design of the built environment?

65 responses



4a. If your answer to #4 is very likely or likely, please specify the field(s) you might pursue.

9 responses

landscape arch/urban planning, unrelated fields may be product or graphic design

Architecture, environmental design, sustainable design, planning

Product design, fashion, entrepreneurship...

Sustainable Practices/Technology

N/A

Pilot in the USAF

Horticulture/ agriculture

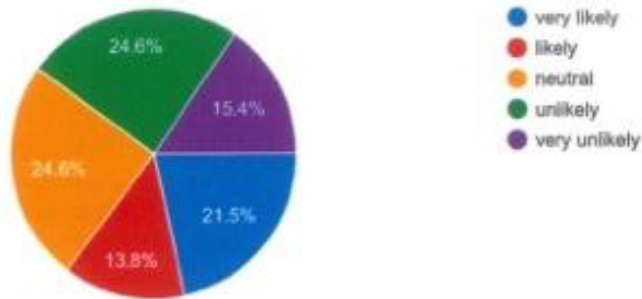
I would like to look into 3D Environmental Design, or Furniture Design

Legislati

Graduate degrees at the UHM SOA

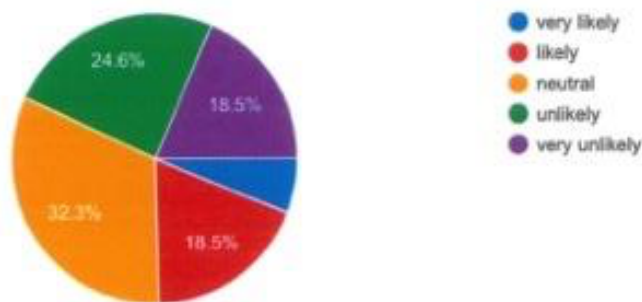
5. Do you plan to apply to the School's 3-year Doctor of Architecture (DArch) program?

65 responses



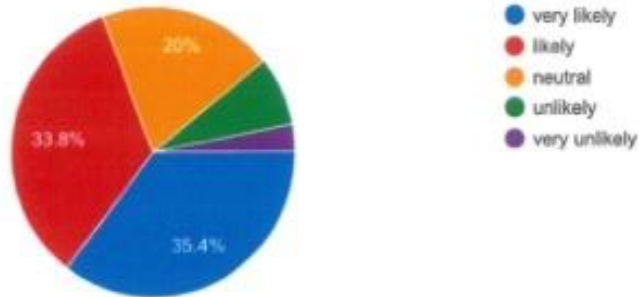
6. Do you plan to apply to the School's 2-year Master of Landscape Architecture (MLA) program?

65 responses



7. Would you apply to a 2-year Master of Architecture (MArch) program if offered by the SOA?

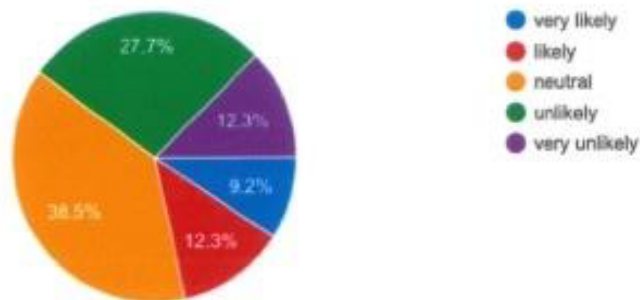
65 responses



Graduate degrees at other institutions

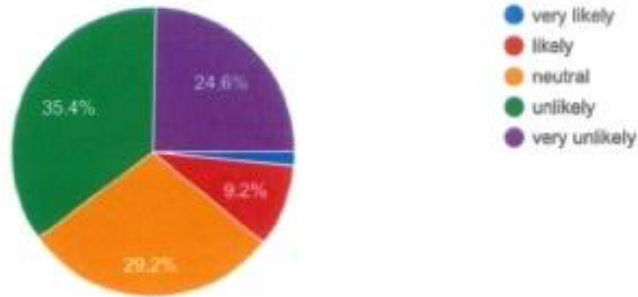
8. Do you plan to apply to a MArch graduate program at another institution?

65 responses



9. Do you plan to apply to a MLA graduate program at another institution?

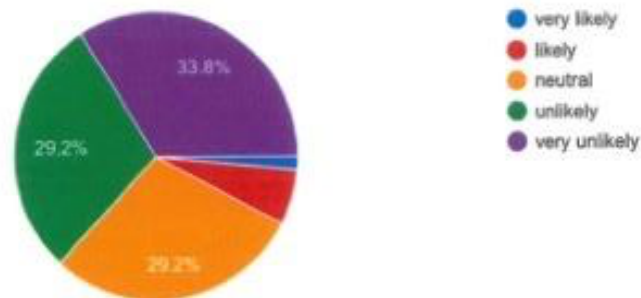
65 responses



Other graduate degrees

10. Do you plan to apply to another graduate program at UH (outside the School of Architecture)?

65 responses



10a. If your answer to #10 is very likely or likely, please specify the field(s) you would like to study.

8 responses

Urban planning

N/a

architecture//law

N/A

Communication

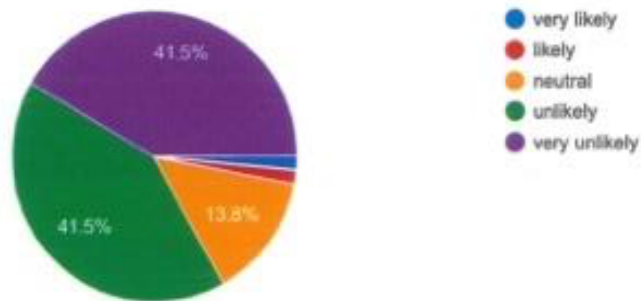
General Architecture, Interior, Industrial

Not clear

undecided

11. Do you plan to apply to a non-architecture graduate program at another institution?

65 responses



11a. If your answer to #11 is very likely or likely, please specify the field(s) you would like to study.

3 responses

N/a

law/film/finance/art criticism

Urban design and planning

Thank you! We appreciate your time in taking this survey.

D. State of Hawaii Architectural Licensing Requirements (Excerpt)

REQUIREMENTS FOR LICENSURE - ARCHITECT

Access this form via website at: cca.hawaii.gov/pvl

REQUIREMENTS

1. Possess the proper education and/or experience as contained below; and
2. Pass the NCARB's A.R.E.

PATHWAYS

There are two basic pathways to licensure:

1. If you are currently licensed in another state, you will be seeking licensure via endorsement.
2. If you are **NOT** licensed in any other state, you will be seeking licensure via AXP/exam.

- On page 1 of the application form, please indicate which pathway (1 or 2) for licensure you are taking.

NOTE: If you passed any examination but are not licensed in any other state, have your exam results sent to the Hawaii Board directly from the other state board you passed exam for.

MINIMUM EDUCATION & EXPERIENCE

The amount of experience required is dependent on the level of education you have and the pathway applicable to you:

	EDUCATION LEVEL	LAWFUL EXPERIENCE	
		[via endorsement]	[via AXP/exam]
1 -	Bachelor's, master's or higher degree in architecture from a school or college approved by the Board; OR	3 years	AXP
2 -	Graduate of a 4-year architectural, pre-architectural or arts and science curriculum from a school or college approved by the Board; OR	5 years	5 years, including completion of AXP
3	Graduate of a 2 year architectural technology curriculum from a community college or technical training school approved by the Board; OR	8 years	8 years, including completion of AXP
4 -	No Degree	11 years	11 years, including completion of AXP

On page 1 of the application form, please indicate which level of education (1 to 4) you have.

FOREIGN EDUCATION

In addition to the foregoing, graduates of foreign colleges (other than from a Canadian accredited college) must have their foreign architectural degree evaluated **if** they wish to have their degree(s) considered. (See below)

Applicants shall be required to have an Education Evaluation Services for Architects ("EESA") evaluation through The National Council of Architectural Registration Boards ("NCARB") by opening a My NCARB account.

To open a My NCARB account, please go to the NCARB website at: www.ncarb.org.

(CONTINUED ON PAGE 2)

E. Letters of Support



March 15, 2021

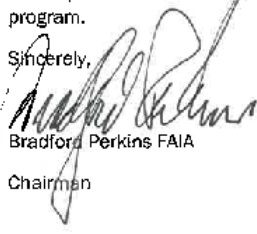
Dean William R. Chapman
School of Architecture
University of Hawaii, Manoa
2410 Campus Road
Honolulu
Hawaii 96822-2316

Re: M. Arch Program

Dear Dean Chapman:

I am writing to strongly support the school's plan to create an M.Arch program. As a longtime member of the School's Advisory Council, participant in the D.Arch program, and employer of student interns and graduates, I believe this is an appropriate expansion of the School's programs. While the school's respected D.Arch program is a great option for many students, the school should also offer a more traditional program, such as the proposed M.Arch, for the many other students who want to pursue a more typical architectural education. I hope this proposed program is approved and implemented in the near future. My partners and I look forward to meeting the students and graduates of this program.

Sincerely,



Bradford Perkins FAIA

Chairman

KATH WILLIAMS + ASSOCIATES

**P.O. Box 1191
Bozeman, MT 59771
Phone: 406-586-3175
www.kathwilliams.com**

March 12, 2021

Dear Dean Chapman,

I strongly support the MArch route as the most attractive and advantageous for the students. As you know, I head a global firm that works on sustainable projects from design through construction, operations and maintenance. Many of my associates from around the world hold a Bachelor in Environmental Design as the most appropriate degree for what we do. We are not designers but we do sit at the table with the owners and design teams, providing a resource in current global sustainable practices and processes.

Although we are not designers, it is important that we all have a deep understanding and appreciation for architecture. An MA in architecture would be an asset to my team and others around the world, giving them that "higher degree". Devoted, focused time to architecture learning and research would be invaluable and pair well with their interests and chosen professional pursuits.

Please add this letter to others who strongly endorse David Rockwood's leadership in developing this academic path. I would be proud to continue my own support of the DArch students at University of Hawai'i Manoa and contribute to the professional preparation offered through MArch.

Best wishes,



Kath Williams, Ed.D
LEED Fellow
President
Kath Williams + Associates, Inc.
P.O. Box 1191
Bozeman, Montana 59771-1191
406-586-3175 (office)

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Dean William R. Chapman
School of Architecture
University of Hawaii – Manoa
Honolulu, Hawaii 96822

March 10, 2021

Dear Bill,

I commend, and endorse, the decision of the School of Architecture for moving forward with the MArch degree.

As you know, I was a Vice President at the American Institute of Architecture for more than seven years overseeing several initiatives including those that promote the influence of architecture in the many ways people live, work and play. It is this important role that necessitates expanding the pipeline and opportunities for those seeking a career in architecture. The MArch degree offers such an opportunity.

In my current role as the Chief Operating Officer for the CFP Board, the standard setting organization that administers the requirements for CFP® certification in financial services, we are in constant competition for talent to ensure the profession's growth and relevance. Architecture faces the same competition. Providing pathways to pursue this career is imperative. The MArch program provides an additional pathway to the profession.

As an Advisory Council member and a donor, I support this direction wholeheartedly.

Best regards,



Elizabeth M. Stewart, Esq.
Chief Operating Officer



PACIFIC ARCHITECTS

March 16, 2021

University of Hawaii
School of Architecture
2410 Campus Road
Honolulu, Hawaii 96822-2216

Attention: Mr. William R. Chapman, Dean

Subject: Re-instatement of MArch Degree

Aloha Bill,

This letter is written in support of the School of Architecture's decision to re-establish the MArch degree program. I agree that, besides the School's current BEnvD (Bachelor of Environmental Design) and DArch (Doctor of Architecture) degrees, an accredited MArch degree should be added. This will allow our students to receive professional education in compliance with a standardized national curriculum accredited by NCARB (National Council of Architectural Registration Boards) and NAAB (National Architectural Accrediting Board).

Your initiative will allow more students to engage with local work force communities and achieve licensure earlier without having to leave the state. Hawaii's design and building industries are extremely unique from anywhere else; and are in dire need of filling positions vacated by aging personnel. As a practicing architect, general contractor and Hawaii's 2020 BIA-Hawaii (Building Industry Association of Hawaii) President, I have been made very aware of the impending workforce shortage the State will experience within the design and building communities.

Your offering of a (4+2) MArch degree will certainly strengthen the School, attract students locally and from abroad, increase enrollment and tuition receipts; and provide greater value for our students and employers. I would like to also offer the following for consideration:

1. That the School continue its teaching collaboration with HCC (Honolulu Community College)... to strengthen the technical skills of UH BEnvD students while also allowing HCC to develop a Pre-Architecture degree program.
2. That the BEnvD curriculum be realigned to assist with the preparation of students interested in continuing on to their Master's degrees.
3. That an accelerated MArch program be considered... providing added value ... through summer school sessions and/or other means.

I greatly appreciate this opportunity to voice my support of the School of Architecture's efforts to re-establish its MArch Degree. I implore the Board of Regents and the Administration to look favorably upon your initiative and to provide all support necessary for its implementation and success.

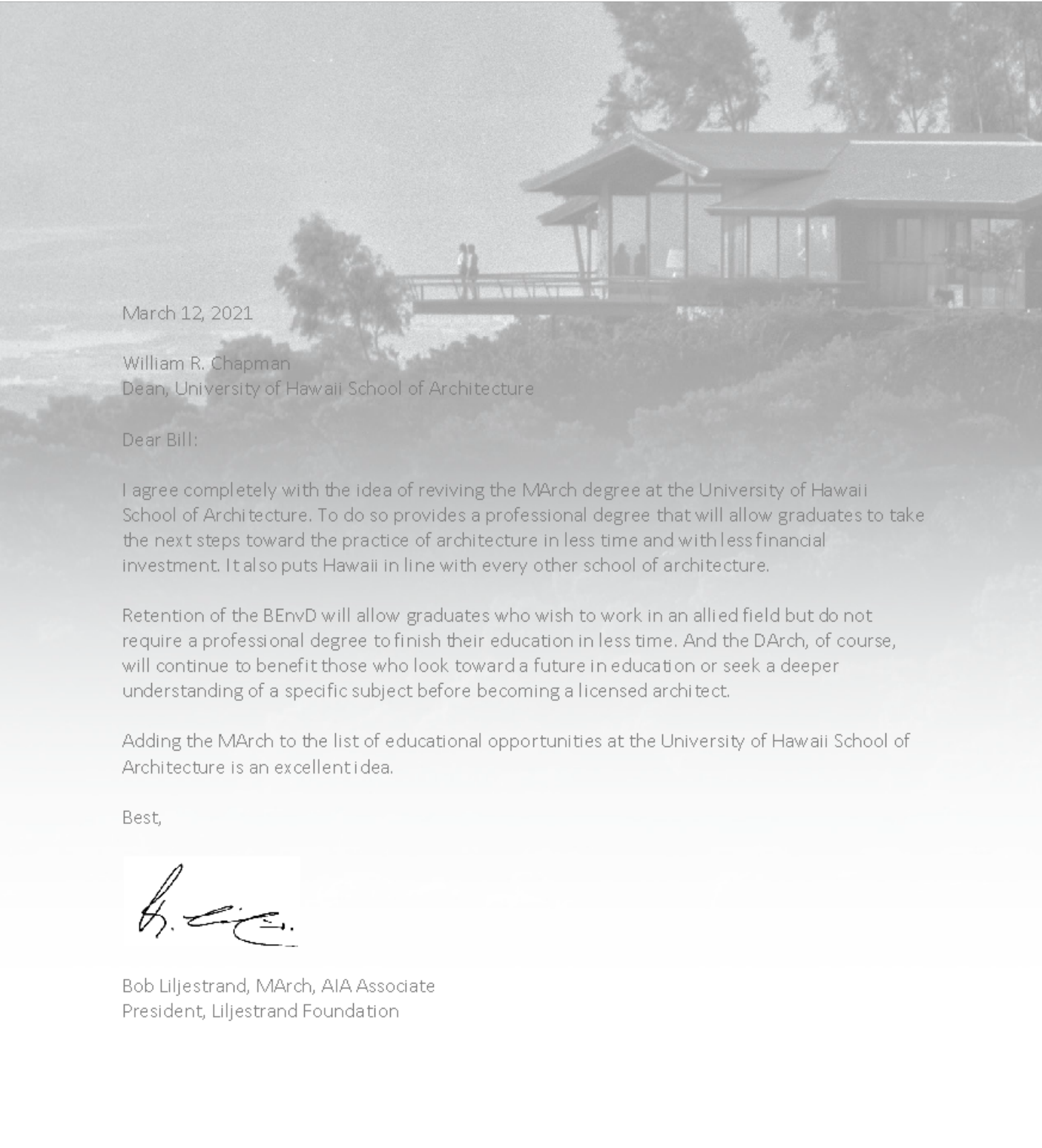
Mahalo and Best Regards,
Pacific Architects, Inc.

A handwritten signature in black ink, appearing to read "Dwight Mitsunaga". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Dwight Mitsunaga, FAIA, ArchD, NCARB
President

University of Hawaii: BA '72, MArch '75, ArchD '00

University of Hawaii, School of Architecture Advisory Council Chair
Honolulu Community College, AEC Program Advisory Committee Member
Chaminade University, E+ID Program Advisory Committee Member
Building Industry Association of Hawaii, Education Committee Member



March 12, 2021

William R. Chapman
Dean, University of Hawaii School of Architecture

Dear Bill:

I agree completely with the idea of reviving the MArch degree at the University of Hawaii School of Architecture. To do so provides a professional degree that will allow graduates to take the next steps toward the practice of architecture in less time and with less financial investment. It also puts Hawaii in line with every other school of architecture.

Retention of the BEnvD will allow graduates who wish to work in an allied field but do not require a professional degree to finish their education in less time. And the DArch, of course, will continue to benefit those who look toward a future in education or seek a deeper understanding of a specific subject before becoming a licensed architect.

Adding the MArch to the list of educational opportunities at the University of Hawaii School of Architecture is an excellent idea.

Best,



Bob Liljestrand, MArch, AIA Associate
President, Liljestrand Foundation

LILJESTRAND FOUNDATION

(808) 537-3116 • 3300 TANTALUS DRIVE, HONOLULU, HAWAII 96822
INFO@LILJESTRANDFOUNDATION.ORG • LILJESTRANDFOUNDATION.ORG



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March 17, 2021

Dr. William R. Chapman
University of Hawaii, Manoa
School of Architecture
2410 Campus Road
Honolulu HI 96822-2216

Via email: sekimoto@hawaii.edu

Aloha Dean Chapman,

We are writing to express our support for the reinstatement of the Masters of Architecture program at the UHM School of Architecture. We have a number of very valued UHM alumni in our office, the vast majority do not have the Doctorate of Architecture. We believe this will help more local students stay in Hawaii for their education. It offers students the flexibility to do their Bachelor's of Environmental degree or their Masters of Architecture degree out-of-state, yet keep a portion of their education affordable and in state.

We also have a number of staff that have their Masters from various schools throughout the United States and Canada. We believe there is value in having a graduate degree in their training and knowledge base.

We fully endorse the reinstatement of the Masters of Architecture degree at the UHM School of Architecture. Thank you for the opportunity to express our opinion.

Sincerely,

Louis Fung, President | Fung Associates, Inc.
2013 President | AIA Honolulu Chapter
2016 Louise Blanchard Bethune Fellow | AIA Strategic Council
2016-2018 President | AIA Hawaii State Council
2019-Present Member | UH SOA Advisory Council

Tonia Moy, Vice President
MARCH, UHM School of Architecture
Fung Associates, Inc.
2020-Present Member | UH SOA Advisory Council



Architects Hawaii Ltd.
733 Bishop Street, Suite 3100
Honolulu, Hawaii 96813

808.523.9636
www.ahldesign

David A. Miller AIA, LLDP AP
Bettina Mehnert FAIA, LEED AP
William A. Brizee AIA, LEED AP
W. Terry McFarland AIA, IFFD AP
Emile C. Alano AIA, IFFD AP
Lisa Y.T. Rapp AIA, LEED AP
Lester H. Ng LEED AP
Nathan Saint Clare AIA
Myles M. Michibata AIA, LLDP AP

Jean-Louis Loveridge LEED AP
Garret S. Horimoto RA
Michael G. Kim IFFD AP
Daniel B. Moats LEED AP
Ethan J. Twer AIA
Brad K. Inovejas AIA, LEED AP
Jeffrey L. Lee AIA, IFFD AP
Katie Stephens AIA

Cynthia M. Work RA, LEED AP
Sara B. Belczak IIDA, ASID
Daniel S. Funakoshi CPA
Charles H. Nishimoto AIA, LEED AP
Raymond N. Okamoto CSI
Joel L. Ganotisi RA, IFFD AP
Keane K. Kakuda AIA, IFFD AP
Mariel M. Moriwake AIA, LEED AP
Colette Abe Lee IIDA, LEED AP
James Neu-Wa O'Neill Assoc. AIA
Ina Wong AIA, LLDP AP
Frederick Hong AIA, LEED AP
Deirdre Stearns AIA, LEED AP

March 23, 2021

Dean William R. Chapman
University of Hawai'i at Manoa
School of Architecture
2410 Campus Road
Honolulu, HI 96822

Aloha Dean Chapman,

We are writing to you in support of the Master of Architecture (MArch) program at the University of Hawaii at Manoa.

Reinstating the MArch degree would allow the UH School of Architecture to preserve the BEnvD and DArch degrees currently in place, while providing an option for an advance professional Architecture degree.

With the current BEnvD program in place, the MArch program will allow students of the BEnvD program to obtain an additional professional degree in 2 years, should they want to further their education, without having to complete the lengthy research project required in the DArch program. While the DArch program is the logical path for many students, particularly those looking ahead to a research or academic profession, the MArch program would offer an opportunity to obtain additional focused studies and an advance degree that is more obtainable due to financial and time commitments, and that would provide them with additional skills and tools to utilize in their career.

The MArch program also offers students with a non-Architectural Bachelor's degree (BArch) an opportunity to pursue obtaining an advanced architectural degree, creating a more diverse and broadly developed group that would be available to the Hawaii professional scene.

Here at AHIL, we have several employees who are a product of the JH MArch program, and we appreciate the skills that they have brought to our firm and profession. Signed below, we readily endorse the reinstatement of the MArch program at the University of Hawaii at Manoa.

Sincerely,

Bettina Mehnert, FAIA, LEED AP
President & CEO

David A. Miller, AIA, LEED AP
Chairman & Principal

F. SoA MArch Program Supplemental Information for Admission Form:

University of Hawai'i at Mānoa
SCHOOL OF ARCHITECTURE
Master of Architecture (MArch)
Supplemental Information for Admission

Name (Mr. / Ms. / Mrs.) (please print) _____

Phone _____ Email _____

UH System Application form being submitted for entry to MArch in: Fall 20_____

SUPPLEMENTAL DOCUMENTS (become the property of the School of Architecture):

- 1. Statement of Interest:** An essay of approximately 500 words addressing the following:
 - ∇ Why do you want to study at UHM School of Architecture?
 - ∇ What are your goals and expectations from study in the MArch program?
- 2. Resume:** A listing of educational background, professional experience or internships, and educational and/or professional awards and honors, including any volunteer or community service. Other relevant experiences or skills as may be appropriate.
- 3. Portfolio:** 8.5" x 11" is preferred size; not to exceed 11"x14"
Portfolio should include samples of creative and professional work, such as art or craft work, construction work, graphic design, computer aided design, poetry, photography, examples of architecture or related disciplines that exhibit graphic or written creativity, or any other creative work.

Portfolio submission must be in **PDF format as ONE multiple-page PDF document at 300 dpi, not to exceed 20 MB in file size.**
- 4. Letters of Recommendation:** Three letters of recommendation endorsing your potential to succeed in a rigorous professional architecture program. Please be sure to have the recommender clearly identify you as the student for whom the letter is being written. We recommend that at least two of the three letters of recommendation be written by former undergraduate program faculty members.

SUBMISSION OF SUPPLEMENTAL DOCUMENTS:

Supplemental documents, 1 thru 4, to be uploaded to the Graduate Application Supplemental Documents site at <https://documentupload.manoa.hawaii.edu/upload/#/login>

Please provide the link to the authors of your letters of recommendation to upload letters directly to the site. Letters should not be submitted by the applicant.

Hardcopy submittals of recommendation letters should be signed across the sealed envelope flap and mailed to: University of Hawai'i at Mānoa School of Architecture, MArch Admissions Committee, 2410 Campus Road, Room 202, Honolulu, Hawaii 96822-2216



UNIVERSITY
of HAWAII
MĀNOA

UNIVERSITY OF HAWAII
BOARD OF REGENTS

College of Natural Sciences
Office of the Dean


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February 16, 2022

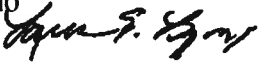
MEMORANDUM


To: Randolph G. Moore
Chair, Board of Regents


VIA: Ernest Wilson
Chair, BOR Committee on Academic and Student Affairs

VIA: David Lassner
President 

VIA: Debora Halbert
Vice President for Academic Strategy, UH System 

VIA: Michael Bruno
Provost  for Michael Bruno

VIA: Laura E. Lyons 
Interim Vice Provost for Academic Excellence

From: Dean Aloysius Helminck
College of Natural Sciences. 

SUBJECT: REQUEST FOR ESTABLISHED STATUS FOR THE BACHELOR OF ARTS IN
BIOCHEMISTRY and BACHELOR OF SCIENCE IN BIOCHEMISTRY
DEGREES AT THE UNIVERSITY OF HAWAII AT MANOA

SPECIFIC ACTION REQUESTED:

It is respectfully requested that the Board of Regents grant established status to the BACHELOR OF ARTS IN BIOCHEMISTRY and BACHELOR OF SCIENCE IN BIOCHEMISTRY degrees in the COLLEGE OF NATURAL SCIENCES at the University of Hawai'i at Mānoa.

RECOMMENDED EFFECTIVE DATE:

Upon Board approval.

ADDITIONAL COST:

There are no additional costs associated with the establishment of this degree program. All courses are currently being taught.

2565 McCarthy Mall, Keller Hall Suite 201
Honolulu, Hawai'i 96822
Telephone: (808) 956-6451
Fax: (808) 956-9111
natsci.manoa.hawaii.edu

An Equal Opportunity/Affirmative Action Institution

BACKGROUND:

Board of Regents Policy 5.201 Parts III.B confer upon the Board the authority to grant established status to provisional degree programs, and states that a request must be made to the Board to transition a degree program from provisional to established status, and that the recommendation by the president for approval by the Board shall include the results of a program review. The results of the program review are presented in the attached document.

Program's role within Mānoa and other UH campuses:

In 2012 the University of Hawai'i at Mānoa was granted provisional status for degrees in Biochemistry within the College of Natural Sciences. The Biochemistry Degree Program is organized within the Department of Chemistry to provide a broad education in cross-disciplinary topics that lie at the interface of chemistry and the life sciences, leading to Bachelor of Arts in Biochemistry or Bachelor of Science in Biochemistry. The courses leading to these degrees prepare students for careers in fields where a core understanding of the chemistry of biological processes is essential. Examples include scientific disciplines such as biochemistry and chemistry, medicinal and pharmaceutical chemistry, biotechnology, biomedical sciences, and environmental sciences, as well as the various health disciplines such as medicine, dentistry, pharmacy, and veterinary medicine. The addition of advanced major elective lecture and lab courses in chemistry, biology, microbiology, physiology, or bioengineering allow students to gain exposure to the cutting edge of theory and techniques in these specialized fields of particular relevance in the COVID-era.

At UH Mānoa, conceptually related degree programs in Molecular Cell Biology (BS MCB, CNS) and Molecular Bioscience and Biotechnology (BS MBB, CTAHR) exist, but there is no significant overlap as the Biochemistry curriculum requires significantly more Chemistry/Math/Physics courses and fewer courses in the biological sciences. The Biochemistry program within CNS remains a popular degree choice for students and is vital for attracting STEM students. Average enrollment has consistently been between 150-170 students in the last five years indicating considerable demand among students for training in Biochemistry with an emphasis on the fundamental chemical, as opposed to biological, principles. For comparison, related BS degrees in Molecular and Cell Biology and Molecular Bioscience and Biotechnology that approach some of the same questions from a biological perspective, have averaged 63 and 41 majors since AY2015.

Since our provisional status was approved, the U.H. Hilo Chemistry Department recently introduced a Biosciences Track within their BS in Chemistry Degree. This track takes a similar approach of combining courses from the traditional chemistry curriculum with a selection of biology courses. As such, it serves a similar purpose of preparing students for admission to health-related professional schools. However, due to the broader scientific expertise within the UH Mānoa faculty, our campus can offer a more diverse range of advanced science courses and advanced laboratory courses that are included in the biochemistry curriculum as major elective courses. Failure to continue to offer the degree would place UH Mānoa in a unique situation, relative to our peer and benchmark institutions, of being the only R1 institution that does not offer an undergraduate biochemistry degree.

Assessment of program's ability to meet proposed enrollments, completions, operating and instructional resource and facility needs:

Average enrollment has consistently been between 150-170 students in the last five years indicating considerable demand among students for training in Biochemistry with an emphasis on the fundamental chemical, as opposed to biological, principles. For comparison, related BS degrees in

Molecular and Cell Biology and Molecular Bioscience and Biotechnology that approach some of the same questions from a biological perspective, have averaged 63 and 41 majors since AY2015.

As outlined in the proposal, the Biochemistry Degree Program has successfully met these goals. We have ~140 graduates in the past six years. Many of our top graduates have been awarded admission to and attended outstanding graduate and professional schools, including the John A. Burns School of Medicine and the Daniel K. Inouye College of Pharmacy. Program enrollment has been consistently >160 students per year over the last six years, with an average time to degree of 3.67 years.

The program is highly efficient and cost-effective because it primarily uses existing courses required by Chemistry majors and courses offered by other units on campus. The estimated tuition revenue is ~\$1.7M, with an average annual cost of ~\$0.5M.

ACTION RECOMMENDED:

It is respectfully recommended that the Board of Regents grant established status to the BACHELOR OF ARTS IN BIOCHEMISTRY and BACHELOR OF SCIENCE IN BIOCHEMISTRY degrees in the COLLEGE OF NATURAL SCIENCES at the University of Hawai'i at Manoa.

Attachment: Proposal for Provisional to Established Status for Biochemistry, [Approved Provisional Status for BA and BS in Biochemistry](#)

cc: Executive Administrator and Secretary of the Board Kendra Oishi

Provisional to Established Status Proposal

Bachelor of Arts (B.A.) Degree in Biochemistry

Bachelor of Science (B.S.) Degree in Biochemistry

Department of Chemistry
College of Natural Sciences
University of Hawai'i at Mānoa

January 2022

Table of Contents

1. Executive Summary	3
2. Alignment of the Program with the Mission and Strategic Planning of the Campus and University System	3
Relationship to the University Mission and Strategic Plans.....	3
Uniqueness of the Biochemistry Program within the U.H. System and Evidence of Continuing Need of the Program.....	5
3. Program enrollment and Graduation	5
Program Enrollment.....	5
Course Enrollment.....	6
Program Completion.....	6
4. The Instructional Resources Required for the Program and their Utilization Compared with Anticipated Resources.	8
Instructional Resources.....	8
Revenue.....	8
Costs.....	9
Space Resources.....	9
5. Is the Program Organized to Meet its Objectives?	10
Program Modifications.....	10
Program Advising.....	11
6. Evidence of Student Learning and Student and Program success.	12
Assessment Activities.....	12
American Chemical Society Biochemistry Exam.....	12
CNS Student Academic Success Center Exit Surveys.....	12
Biochemistry Program Alumni Survey.....	13
6. Appendix	15
BA and BS in Biochemistry Curriculum.....	15
Undergraduate Research.....	16
Capstone Experience.....	15
Provisional Proposal.....	16

1. Executive Summary

The Biochemistry Degree Program is organized within the Department of Chemistry to provide a broad education in cross-disciplinary topics that lie at the interface of chemistry and the life sciences, leading to a Bachelor of Arts in Biochemistry or Bachelor of Science in Biochemistry. The courses leading to these degrees prepare students for careers in fields where a core understanding of the chemistry of biological processes is essential. Examples include scientific disciplines such as biochemistry and chemistry, medicinal and pharmaceutical chemistry, biotechnology, biomedical sciences, and environmental sciences, as well as the various health disciplines such as medicine, dentistry, pharmacy, and veterinary medicine.

The Biochemistry Degree Program has successfully met these goals, with ca. 140 graduates in the past six years. Many of our top graduates have been awarded admission to and attended outstanding graduate and professional schools, including the John A Burns School of Medicine and the Daniel K. Inouye College of Pharmacy.

In this report, we outline the current organization of the program, demonstrate the success of the provisional program, and petition for approval as an established program.

2. Alignment of the Program with the Mission and Strategic Planning of the Campus and University System

Relationship to the University Mission and Strategic Plans

The Biochemistry Program within the Department of Chemistry provides a broad education in applying chemical principles to biological topics, leading to the degrees of Bachelor of Arts or Bachelor of Science in Biochemistry. The curriculum is designed to provide students with the foundational understanding of chemistry, physics, and biology that is required for admission to graduate school in a variety of STEM disciplines, for admission to professional schools in a variety of health-related disciplines, and to enter the workforce in a variety of STEM-related occupations. In addition, the addition of advanced major elective lecture and lab courses in chemistry, biology, microbiology, physiology, or bioengineering allow students to gain exposure to the cutting edge of theory and techniques in these specialized fields of particular relevance in the COVID-era.

The UH Mānoa strategic plan¹ includes a focus on “Enhancing Student Success” and “Excellence in Research,” both are areas to which the Biochemistry Program

¹ 2015-2025 Strategic Plan: <https://manoa.hawaii.edu/wp/wp-content/uploads/2020/12/manoa-2025-strategic-plan.pdf>

contributes. The faculty and advisors within the Biochemistry Program have demonstrated that we can guide students through a complex, academically rigorous curriculum with high graduation rates (~60% of students graduate with a biochemistry degree, ~80% overall graduate with a degree), and ~65% of students graduating with a biochemistry degree have a GPA > 3.0, allowing them to be competitive for admission to graduate and professional schools. In terms of our support for the research enterprise, many of our students participate in undergraduate research. Many students eventually choose to continue their scientific education as graduate students in various departments at UH Mānoa, JABSOM, or at top-ranked mainland universities. The training these students receive through the Biochemistry Program prepares them to succeed in their future research endeavors at UH.

The State of Hawai'i faces shortages of healthcare workers at all levels, including doctors, nurses, physician's assistants, and pharmacists. The Biochemistry Program provides a foundational education that allows our graduates to gain admission to professional schools in these disciplines and excel in fields related to Biochemistry once they have completed their education. We have numerous examples of graduates who have attended JABSOM to earn their M.D. and become practicing doctors, attended the UH Mānoa School of Nursing, and now work caring for others in our community, or attended UH Hilo School of Pharmacy and become pharmacists safely providing prescription medications and vaccines throughout our state.

The biochemistry degree program also aligns with UHM's goals of becoming a Native Hawaiian Place of Learning. During this period, three Native Hawaiian APTs and two Native Hawaiian lecturers were hired within the department to support this program. After developing his skills as a teacher at UHM, one lecturer went on to become faculty at another campus with the UH system. The other lecturer was hired to teach classes in collaboration with the Native Hawaiian Student Services program on campus in 2017 and 2018 to facilitate Native Hawaiian student success. Those efforts lead to a wonderful summer course in which students learned about the chemistry of the oceans and took a field trip to a surfboard factory to actively learn about the complex chemistry that unpins both, helping students realize how chemistry is an important aspect of their kuleana to Hawaii and aloha 'āina. Tenure track faculty within the program are also engaged with the community and integrate place-based concepts in the undergraduate classes and grants to provide a more enriching experience and additional opportunities for students. Both junior faculty in the program currently have NSF CAREER awards with strong place-based initiatives. For example, one initiative funded by the NSF involves partnering with the Bernice Pauahi Bishop Museum to develop an exhibit entitled "Knots in Hawaiian and Polynesian Culture." Content from this exhibit is then brought back into the classroom to illustrate how knots that were traditionally used in Hawaii can provide insights into the 3D structure of folded proteins. Biochemistry also is strongly connected to the goals of mālama 'āina. Many of the pressing problems in sustainability have solutions in biochemistry, whether that is the degradation of

waste products or environmentally friendly ways to mitigate our dependence on fossil fuels. Students within the biochemistry program get to participate in research projects trying to solve these types of problems. Faculty and students within the department are also involved in an effort to understand our local environment through studying the chemical produced by Hawaii's marine organisms and our participation in the Integrative Center for Environmental Microbiomes and Human Health focused on microbiome research in the Hawaiian Islands.

Uniqueness of the Biochemistry Program within the U.H. System and Evidence of Continuing Need of the Program

Our recent analysis of peer and benchmark universities showed that all of these institutions offered an undergraduate biochemistry degree through either biochemistry, chemistry, biology, or agriculture department. When the Biochemistry Program was implemented as a provisional program, it was the only program to offer undergraduate degrees in biochemistry within the UH system, and this remains the case today. At UH Mānoa, conceptually related degrees in Molecular Biology exist, but as pointed out by the CMB Department Chair in our provisional application in 2012, there is no significant overlap as our "curriculum requires significantly more Chemistry/Math/Physics courses and less Biology/Microbiology courses than their program." These facts remain true. Since our provisional status was approved, the UH Hilo Chemistry Department has recently introduced a Biosciences Track within the B.S. in Chemistry Degree. This track takes a similar approach of combining courses from the traditional chemistry curriculum with a selection of biology courses. As such, it serves a similar purpose of preparing students for admission to health-related professional schools. However, due to the broader scientific expertise within the UH Mānoa faculty, our campus can offer a more diverse range of advanced science courses and advanced laboratory courses that are included in the biochemistry curriculum as major elective courses. By successfully completing these courses, students are better prepared to excel in graduate school in the various STEM disciplines or begin STEM-related careers. Average enrollment has consistently been between 150-170 students in the last five years indicating considerable demand among students for training in Biochemistry with an emphasis on the fundamental chemical, as opposed to biological, principles. For comparison, related BS degrees in Molecular and Cell Biology and Molecular Bioscience and Biotechnology that approach some of the same questions from a biological perspective, have averaged 63 and 41 majors since AY2015.

3. Program enrollment and Graduation

Program Enrollment

The Biochemistry Program began in Fall 2012 with eight existing UHM students that changed their majors from Chemistry and Biology. It quickly grew as entering first-year students discovered the new degree options. The current major has stabilized at approximately 160 total students, with around 40 entering students declaring as biochemistry majors each year

One initial concern during the development of the program was that the biochemistry major would drain students away from the chemistry major, resulting in no net gain in students for the Chemistry Department. There was an initial loss of enrollment in the chemistry major – a decrease from ~130 students before AY14 to ~80 students in AY19. However, growth in the biochemistry major to ~160 total students resulted in a net increase of ~90 undergraduate majors in the Chemistry Department. This increase is a little lower than our initial projections but consistent with response rates from surveys taken in GenChem, which predicted approximately 40/year as mentioned in the proposal for provisional approval.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Current Year
Projected Enrollment	45	90	130	165	185	195	195	195	195	195
Actual Enrollment	13	71	112	153	166	183	186	157	163	163

Course Enrollment

Three new courses, CHEM 361, 462, & 462L, were introduced for the Biochemistry Program (CHEM 361 was recently renumbered to 461). One course, CHEM 372, was modified from an elective course for the chemistry degree to a core course for the biochemistry curriculum. The enrollment of these courses has remained relatively constant over the last five years (AY2015 – AY2020 average shown):

	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	AVG
CHEM 361	9	11	13	37	33	31	34	28	33
CHEM 372	22	26	38	37	40	45	34	38	39
CHEM 462	---	5	12	18	22	13	13	19	17
CHEM 462L	---	4	5	20	20	13	18	17	18

Program Completion

The average number of graduates from the program has stabilized at approximately 28 students per year. As this was not estimated in the provisional proposal, a direct comparison with initial estimates is impossible. Entering and transfer students are often encouraged to enroll initially in the B.S. degree, as the increased requirements for advanced courses will generally prepare the students for a broader range of advanced education and career options. The B.A. degree remains a popular option for students specifically interested in pharmacy school or for students who fall behind the recommended 4-year plan and wish to graduate in a shorter amount of time.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Annual Program Completion	0	5	9	22	28	27	29	18	29

The annual average number of graduates (25 students) seems low compared to the

average number of students in the program (150 students), suggesting either attrition from the program or a long time to completion for the degree. Analysis of the persistence of entering students in the Fall 2015 cohort suggests the former accounts for this disparity. Of the entering students that declared as biochemistry majors in Fall 2015, only 72.3% remained in the degree program in Fall 2016. However, 13.5% of the students that left the biochemistry major remained at UHM in other degree programs, while 13.4% left UHM entirely.

	End of 1 YR	End of 2 YR (Cumulative)	End of 3 YR (Cumulative)	End of 4 YR (Cumulative)	End of 5 YR (Cumulative)
Fall 2015 BA/BS Biochem Cohort Remaining in Major	72.3%	67.8%	61.9%	61.1%	60.3%
Transferred to Another CNS major	4.0%	8.7%	9.5%	7.9%	7.9%
Transferred to Another UHM major	9.5%	9.5%	11.1%	11.9%	10.3%
Left UHM	13.4%	16.7%	16.7%	18.3%	20.7%

Persistence after five years primarily reflects the percentage of entering students that graduate with a degree. Of the entering students declared as biochemistry majors in Fall 2015, 60% persisted in the major after five years and likely received a biochemistry degree, while an additional 19% persisted in CNS or received another degree from UHM. Reasons for attrition of our students are currently being assessed with the goal of trying to develop targeted interventions.

The 5-year attrition rate for entering students who declare as biochemistry majors is 20.7%, close to the 5-year attrition rate for all entering UHM students in the 2015 cohort of 19.7%.

The median time-to-degree for entering students in the biochemistry program is 3.66 years, while the mean time-to-degree is 4.22 years, which compares very favorably with the overall UHM time-to-degree of 4.33 years (median) and 4.61 years (mean). The disparity between median and mean times reflects a small number of students that take 5-8 years to graduate. Major advisors comment that these long graduation delays are usually due to personal reasons and do not reflect any identifiable bottlenecks in the program.

Another reason for our lower median time-to-degree is the ease at which students can transfer courses taken at other UH campuses or mainland schools. The content required in the first two years of the major (Chemistry, Biology, Math, and Physics) is somewhat standardized across the United States making transfer straightforward if a student has completed the entire series at another school. Credit for upper division transfer courses is also relatively common as well given the wide range of electives our majors are allowed to use to fulfill major requirements.

4. The Instructional Resources Required for the Program and their Utilization Compared with Anticipated Resources.

Many factors complicate the analysis of the instructional resources needed for the biochemistry program. These factors include the fact that faculty who teach classes required for our Biochemistry major also teach large service classes at the 100-level, that our biochemistry majors are required to complete courses also required by CHEM majors, and that the major uses classes taught by other units to fulfill Upper Division Major degree requirements. Calculating accurate metrics like costs is exceedingly difficult as the required data is not directly available to the department, e.g., the fraction of biochemistry majors in other units' classes, instructor salaries, etc. We have made our best attempt to estimate both cost and revenue below.

Instructional Resources

The provisional application indicated that the Biochemistry program would need four faculty, three of whom were already CHEM faculty and one new hire. Currently, we have only three faculty supporting the biochemistry program directly. During the review period, two of the three original faculty members departed UHM to accept positions on the mainland, primarily due to offers of enhanced research facilities and opportunities. After they departed (2014), we used a temporary instructor on a two-year contract to cover the teaching load. We are, therefore, currently operating the program with one fewer faculty member than anticipated. While the program can be sustained at this level, the eventual hiring of a fourth tenure-track faculty member for the program would allow for the existing faculty more opportunity to contribute to the teaching of our service and graduate courses while also allowing us to develop an additional upper-division course focused on more recent developments in the field.

Revenue

Given the caveats above, we have calculated tuition revenue in two ways. The first is calculated using only enrollment numbers for only Chem 361, 462, and 462L, as these are the only new classes created as part of the biochemistry program. A per-credit cost of \$471/credit (AY2021) is used each year for consistency, yielding ~\$30K per year in revenue. A second approach that perhaps provides a more realistic picture of the revenue generated by the program is obtained by assuming all majors are full-time students. At \$5652 tuition per semester for full-time residents, this latter method estimates ~\$1.7M in revenue for the last four years. Lab fees for our 400-level advanced biochemistry lab were approved recently, which should generate an extra \$3000 in revenue per year starting in Fall 2022

Instructional Revenue	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Projected	522K	722K	812K	815K	872K	933K	NA	NA	NA
Combined Tuition	4K	9K	12K	35K	35K	26K	29K	30K	29K
Full Resident Tuition based on # majors	90K	542K	1,017K	1,401K	1,548K	1,729K	1,786K	1,616K	1,729K

Costs

The primary costs directly attributable to the program are salaries and benefits for three existing full-time tenure-track faculty (two I3 and one I5) and two one-semester TA positions (25% FTE each). Figures for AY20 are based on current salaries and benefits rates, while prior years represent estimates based on scheduled pay increases and benefits rates. In addition, the biochemistry lab course accounts for ca. \$20,000 per year in lab supply and equipment costs paid from the Chemistry Department's operating budget. Project expenses for the 5th and 6th in the original provisional application are shown and slightly lower than actual operating expenses. Operating costs range between \$130-150 per SSH during the last four years. This is a high-end estimate as biochemistry faculty are also teaching service classes and/or courses required as part of the existing CHEM major. We have not factored this consideration into the cost estimates to be consistent with the original proposal.

	Year 5	Year 6	Year 7	Year 8	Year 9
Faculty Salaries + Benefits	\$431,000	\$449,000	\$461,000	\$477,000	\$493,907
Grad Student GA Salary + Benefits	\$19,940	\$19,940	\$19,940	\$20,734	\$21,567
Total Salary & Benefits Costs	\$450,940	\$468,940	\$480,940	\$497,734	\$515,474
Projected	\$355,065	\$365,718	NA	NA	NA
SSH	2976	3288	3672	3792	3432
Cost per SSH	\$151.53	\$142.62	\$130.97	\$131.26	\$150.20

Space Resources

The program required the renovation of two rooms of Bilger Hall to create a new dedicated biochemistry lab space with an adjoining general use classroom. The space consists of a dedicated biochemistry lab space with room for up to 24 students, a shared instrumentation and equipment room that will also be used for undergraduate and graduate student research, and an attached general use classroom with a capacity of up to 24 students. The renovation was begun in 2015.

In Fall 2021, about a month before the department was to take possession, the new lab was badly flooded during heavy rains. At the time, that section of Bilger Hall was being re-roofed. The resulting damage delayed use of the rooms until Spring 2022. While the space is not completely restored yet, repainting has been delayed due to COVID-related supply chain issues, we began utilizing the lecture hall for classes this semester and in mid-March began teaching our advanced biochemistry lab in this beautiful new lab space.

Going forward we anticipate this classroom and lab will be used primarily for the Advanced Biochemistry Lecture and Lab courses during the spring semester. In addition, the lecture room is well suited for general chemistry recitations or upper-division lectures throughout the year. We also anticipate using the teaching lab as swing space when renovations of our general chemistry labs begin next year, while the shared instrumentation and equipment room will be used year-round. At this time, we anticipate this new space will be sufficient for our current and future

teaching needs (5-10 yrs) for the biochemistry program.

5. Is the Program Organized to Meet its Objectives?

The overarching objective of the Biochemistry Degree Program is to provide a broad scientific education guided by the application of chemical principles to the biological sciences. This educational foundation is intended to prepare students for careers in the sciences and the various health disciplines.

To fulfill this objective, the courses chosen for the degree programs include foundational courses specifically required for admission to medical and pharmacy schools and advanced courses that prepare students for graduate school or direct entry into careers in the sciences. In addition, we have provided significant flexibility for students to tailor their degree towards specific biological sciences by incorporating a selection of upper-division major elective courses in the degree path.

The program is meeting its learning objectives. The program objectives are fulfilled by incorporating several specific learning objectives into courses required for both degrees. For example, one of the learning objectives is to "...demonstrate a qualitative and quantitative understanding of biomolecular structure and reactivity...." These concepts are initially taught in Organic Chemistry (CHEM 272 & 273), are reinforced in Bioorganic Chemistry and Physical Biochemistry (Chem 372 & 361), and are then taken to an advanced level of understanding in Principle of Biochemistry (BIOL 402) and Advanced Biochemistry (CHEM 462). In this way, we can reinforce complex concepts through repetition at increasingly sophisticated levels and demonstrate how these concepts influence modern scientific research and the practical applications in biotechnology and medicine.

The program is also aligned with campus and system goals. At both the system- and campus-level, a significant focus is on enhancing student success (UH Graduation Initiative, UHM Enhancing Student Success), excellence in research (UH Hawai'i Innovation Initiative and UHM Excellence in Research), and UH's Native Hawaiian Place of Learning strategic focus area. In addition, through faculty hires and other collaborative efforts, we have increased our research impact throughout the Mānoa campus. For example, one of the biochemistry faculty is involved in research endeavors related to material science, an area of priority for the campus. Faculty within the program are engaged with the community and integrate place-based concepts in the undergraduate classes and grants to provide a more enriching experience and additional opportunities for students. For example, one initiative funded by the NSF involves partnering with the Bernice Pauahi Bishop Museum to develop an exhibit entitled "Knots in Hawaiian and Polynesian Culture." Content from this exhibit is then brought back into the classroom to illustrate key relationships between biochemistry and Hawaiian Culture. Biochemistry also is strongly connected to the goals of sustainability. Many of the pressing problems in sustainability have solutions in biochemistry, whether that is the degradation of waste products, environmentally friendly ways to mitigate our dependence on fossil fuels, or to understand their fate and persistence in the environment. The degree

uniquely prepares students to tackle these sorts of problems. In addition, we have increased the number of STEM degree holders within the state and developed a degree that is well suited for undergraduates bound for the Daniel K. Inouye College of Pharmacy and the John A. Burn School of Medicine.

Program Modifications

The primary changes to the approved program have been a slight adjustment to the order of courses and some additions to the approved major elective courses.

Two significant changes to the suggested order of courses, as provided to students in the 4-year plan, have been approved:

- Students have been given some flexibility to take Introductory Biochemistry (BIOL 402) at any point during the third or fourth year. This change was necessitated by the addition of biochemistry topics to the Medical College Admission Test (MCAT), necessitating that students take a biochemistry course prior to taking this exam, which many premed students choose to take in the Spring or early Summer of the third year.
- Physical Biochemistry (CHEM 361) has been renumbered to CHEM 461 and is now offered in the Fall semester of the fourth year. This change was necessitated by the addition of a prerequisite requirement that students complete two semesters of both calculus and physics before taking physical biochemistry. Entering students who require remedial math courses often do not fulfill this prerequisite requirement until the third year.
- The capstone biochemistry laboratory was renumbered Chem 462L from its original Chem 463L, and is now offered concurrently with the lecture course rather than one semester later.

The degree requirements rely heavily on major elective courses offered by the life science departments to complete the advanced training in more specialized areas. The Biology Department canceled one course during a reorganization of its curriculum, the MBBE department canceled one course in the original proposal due to the lack of a suitable instructor, and four courses have been added to allow more flexibility for students to follow their particular interests:

Canceled: MBBE 480 – Integrative Genomics & Biotechnology
 BIOL 406 – Cellular Biology

Added: PHYL 301, 301L, 302, 302L – Adv. Anatomy and Physiology & Lab

Program Advising

The Biochemistry Degree Program requires that students submit a curriculum plan every semester that is then reviewed by a major advisor. If the advisor has relevant questions or advice, the student is required to meet with the advisor prior to registration. We work with the College of Natural Sciences Student Academic Success Center to divide up the advising workload as follows:

- Freshman and incoming new students: CNS SASC
- Sophomores: Chemistry Department Academic Support (Mr. Kelly Ching)
- Juniors & Seniors: Major advisors (currently Profs. Jarrett and Sun)
- Transfer students: CNS SASC and Prof. Jarrett
- Graduation and degree certification: CNS SASC and Prof. Jarrett

Students are able to access a description of the degree requirements through several sources, including:

- Chemistry Department website (<http://manoa.hawaii.edu/chem/academics/undergraduate/>)
- UH Mānoa Catalog (<https://manoa.hawaii.edu/catalog/schools-colleges/arts-sciences/nat-sci/chem/>)
- Program sheets and academic plan templates (OVCAA) (<http://www.manoa.hawaii.edu/ovcaa/programsheets/>)

6. Evidence of Student Learning and Student and Program success.

Concrete evidence that we are meeting the cognitive learning objectives for the program includes assessments on a standardized exam where our majors scored an average of 10% higher than the national average. The completion rate for degrees in the department is 56%, which is the highest in CNS and higher than the UHM average of 46%. The overall median time to degree is 3.67 years. Both statistics demonstrate the effective organization of the program. In addition, year-to-year retention is above 80%, reflecting student satisfaction with the program.

Assessment Activities

American Chemical Society Biochemistry Exam

Students in CHEM 462 (capstone course for the B.S. in Biochemistry major) must take the ACS Biochemistry Exam, a 60-question multiple-choice standardized test designed to be used as a graduation learning assessment tool or a graduate school entrance exam. The mean score on the exam from AY16 to AY20 was 68%. In comparison, the national mean as reported by ACS was 56.7%, suggesting our students, on the whole, have learned a significant amount of what is considered the foundation content of biochemistry.

A closer inspection of questions with a high incorrect response rate indicates the following areas are not covered well in the current curriculum: lipid and membrane biochemistry and nucleic acid biochemistry. These areas will be further addressed with new courses once additional faculty positions become available.

CNS Student Academic Success Center Exit Surveys

The College of Natural Sciences Student Academic Success Center coordinates

applications for graduation by all biochemistry majors. The following responses correspond to 27 students that filled out the survey from Fall 2016 through Fall 2018 semesters. There were approximately 35 graduates during this time period, so the response rate is 77%.

- What are your plans after graduation:
 - Professional school: 52%
 - Graduate school: 22%
 - Employment or other: 26%
- If you are continuing your education, what type of program:
 - M.D. 25%
 - Pharm.D. 45%
 - M.S. or Ph.D. 20%
 - Other 10%
- What aspects of the program could be improved: (*top 2 responses*)
 - More class availability
 - Broader selection of course offerings
- What did you like most about the program:
 - Faculty
 - Courses
- What did you like least about the program:
 - Class availability
 - Equipment (broken, old, damaged, etc.)
- What other type of support could the program have provided:
 - More graduate school information
 - Improved academic advising
 - More career and internship information

Biochemistry Program Alumni Survey

A survey of former graduates was conducted via email link to an anonymous online survey in October 2020. Out of 134 graduates, 31 alumni responded to the survey, for a response rate of 23%.

The following questions reflect the immediate continuing education of the respondents:

- Continuing education. Did you enroll in or have you been accepted to:
 - A Medical Professional School: 14 (45%)
 - Graduate School: 8 (26%)
 - Neither: 9 (29%)
- If you went on to a medical professional school, was it:
 - Medical School: 5
 - Pharmacy School: 5
 - Dental School: 2
 - Other: 2

- If you are enrolled or accepted to a Graduate or Professional School, where is the school located?
 - Hawai'i: 10
 - U.S. Mainland: 12
- If you are employed, what type of position:
 - Pharmacy technician
 - Lab technician
 - Diagnostics lab
 - Firefighter

5. Appendix

BA and BS in Biochemistry Curriculum

The Biochemistry Degree Program meets the program objectives and learning objectives through the following course requirements:

Foundational Courses

CHEM 161 & 161L – General Chemistry I & Lab^{b,c}
CHEM 162 & 162L – General Chemistry II & Lab^{b,c}
BIOL 171 & 171L – Introduction to Biology I & Lab^{b,c}
BIOL 172 & 172L – Introduction to Biology II & Lab^{b,c}
MATH 241 – Calculus I^c
MATH 242 – Calculus II
PHYS 170 & 170L – General Physics I & Lab^b
PHYS 272 & 272L – General Physics II & Lab^b

Core Courses

CHEM 272 & 272L – Organic Chemistry I & Lab^{b,c}
CHEM 273 & 273L – Organic Chemistry II & Lab^{b,c}
CHEM 274 & 274L – Analytical Chemistry II & Lab
BIOL 275 & 275L – Cell and Molecular Biology & Lab
CHEM 372 – Bioorganic Chemistry
CHEM 361 – Physical Biochemistry
BIOL 402 – Principles of Biochemistry^b
CHEM 462 & 462L – Advanced Biochemistry & Lab^a

Elective Courses

{Students must choose at least 11 credits (BA) or 16 credits (BS) of upper-division elective courses including a combination of lecture and lab courses}

BIOL 375 & 375L – Genetics & Genetics Lab
BIOL 401 – Molecular Biotechnology
BIOL 407 – Molecular Cell Biology I
BIOL 408 – Molecular Cell Biology II
BIOL 483 – Bioinformatics
CHEM 399 or 399L – Directed Reading or Directed Research
CHEM 425 & 425L – Synthesis and Analysis of Inorganic Compounds & Lab
CHEM 427 – Advanced Inorganic Chemistry
CHEM 445 & 445L – Synthesis and Analysis of Organic Compounds & Lab
MICR 351 & 351L – Biology of Microorganisms & Lab^s
MICR 431 & 431L – Microbial Physiology & Lab
MICR 461 & 461L – Immunology & Lab
MICR 463 & 463L – Microbiology of Pathogens & Lab
MICR 475 & 475L – Bacterial Genetics & Lab
MICR 490 & 490L – Virology & Lab

PHYL 301 & 301L – Advanced Anatomy and Physiology & Lab
PHYL 302 & 302L – Advanced Anatomy and Physiology & Lab
ZOOL 430 & 430L – Animal Physiology & Lab
ZOOL 442 – Introduction to Neuroscience

^aRequired for the BS degree only

^bRequired course for admission to medical school

^cRequired course for admission to pharmacy school

Undergraduate Research

Students are encouraged to participate in laboratory research in any STEM department at UH Mānoa. Students in the Honors Program are given major elective credit for completion of HON 496. In departments that have a course designation for research (e.g., MICR 499, MBBE 499, etc.), students are given credit towards the major elective requirements using this course designation. In departments without a course designation for research (e.g., the CMB Department at JABSOM), students are given credit for CHEM 399 or 399L through a co-mentorship agreement between the research mentor and one of the chemistry department faculty.

Capstone Experience

Advanced Biochemistry (Chem 462) and Advanced Biochemistry Lab (Chem 462L) serve as a capstone experience for the B.S. in Biochemistry degree. Advanced Biochemistry is a lecture and discussion class in which cutting-edge research topics are discussed and analyzed, using both current textbooks and literature articles as resources for exploring cutting-edge topics in human biochemistry. For example, a recent offering of the course included 4-week modules on the use of CRISPR for gene editing, protein (mis) folding diseases such as Alzheimer's disease, and problems with insulin regulation in type II diabetes. The corresponding lab course includes instruction in modern lab techniques and is taught in a research project format, where students work in teams to purify and characterize a new protein or enzyme given only previously published literature protocols. In both courses, students write research proposals and research reports that are similar to those written by professional scientists.



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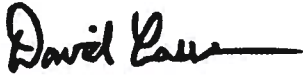
April 12, 2022


MEMORANDUM


'22 APR 27 A9:19


To: Randolph G. Moore
Chair, Board of Regents


VIA: Ernest Wilson
Chair, BOR Committee on Academic and Student Affairs


VIA: David Lassner
President 

VIA: Debora Halbert
Vice President for Academic Strategy, UH System 

VIA: Michael Bruno
Provost  for Michael Bruno

VIA: Laura E. Lyons
Interim Vice Provost for Academic Excellence 

VIA: Peter Arnade
Dean, College of Arts, Languages & Letters 

FROM: Alexander Mawyer
Acting Chair, Department of Pacific Islands Studies 

SUBJECT: REQUEST FOR ESTABLISHED STATUS FOR THE BA IN PACIFIC ISLANDS
STUDIES AT THE UNIVERSITY OF HAWAI'I AT MANOA

SPECIFIC ACTION REQUESTED:

It is respectfully requested that the Board of Regents grant established status to the BACHELOR OF ARTS IN PACIFIC ISLANDS STUDIES in the COLLEGE OF ARTS, LANGUAGES & LETTERS at the University of Hawai'i at Manoa.

RECOMMENDED EFFECTIVE DATE:

Upon approval.

ADDITIONAL COST:

None.

PURPOSE:

The BA in Pacific Islands Studies was approved for provisional status in 2010. After two extensions the program is prepared to submit a request for established status.

BACKGROUND:

Since the establishment of the Pacific Islands Studies program in 1950, the University of Hawai'i at Mānoa (UHM) has been the leader for higher education within and about the Pacific Islands region.

Reorganized as the Center for Pacific Islands Studies in the 1970s around an MA degree program, this unit has long been recognized as the premier program for Pacific area studies nationally and internationally, and

as a home for initiatives bringing together people and resources to promote an understanding of the Pacific Islands and Islanders. Advancing these foundations, the BA program in Pacific Studies offers innovative regional, comparative, and interdisciplinary instruction. By providing integrating expertise from community-specific to regional scale, this program complements and enhances the undergraduate expertise and professional training offered within UHM's discipline-focused departments, supports student preparation toward meeting contemporary regional challenges, and advances critical workforce needs within Hawai'i, the U.S., and beyond.

Granted provisional status in 2010, in response to student demand, particularly from underserved minority students enrolled in PACS 108 sections in the prior period, alongside state and national needs for individuals knowledgeable about Pacific Islander communities in the U.S. and in home(is)lands across Oceania, the BA in Pacific Studies has been designed to complement and address imperatives in UHM strategic plans. Particularly it enhances UHM's place within the Pacific region and role as a Native Hawaiian place of learning—noting that the islands of Hawai'i are “Pacific Islands” with broad and deep, past and present, relations to neighbors across Oceania. Nurturing and maintaining such relationships in domains as diverse as government, conservation, or business, requires material knowledge about those communities and their sociocultural contexts, political histories, and economic dynamics. The value of this BA's community-centered and community-engaged approach was freshly illuminated when one of its core courses was uniquely called out by name in the fall 2021 WASC Accreditation Report, “The institution provided many opportunities for students to connect their in-class learning to communities and industry at the undergraduate and graduate levels. One example is the Pacific Communities in Hawai'i course [PACS 301] that listed explicit learning outcomes and included a service-learning component that required a minimum of 15 contact hours within the community” (13).

If anything, the need for this BA is greater than ever. Critically, historically marginalized and nationally underserved minorities attending the University of Hawai'i include Pacific Islander students of diverse heritage. Today, there are over 20 non-Hawaiian Pacific Islander communities in Hawai'i with astonishing population growth. For instance, between 2000 and 2010 the Chuukese community grew by 544% and the Solomon Islander community by 388% (Kosraean, 301%; Marshallese, 237%; Pohnpeian, 194%; Guamanian or Chamorro, 60%; Tongan, 55%; Samoan, 38%). As the 2020 Census comes into view, it seems clear that these demographic trends continue. The Pacific Studies BA is a critical opportunity for UHM and for UH to meet the needs of this fast-growing student community.

Equally importantly, the Pacific Islands are of global importance in terms of geopolitical security, climate change, migration, sustainability, and the development of Blue Economies, among other critical dynamics. As President Biden noted in 2021, “The United States is a proud Pacific power and will continue to be an active, engaged partner in the region ... [because] a free and open Indo-Pacific is vital to each of our nations' security and prosperity and to all our shared futures.” Pacific Islands are vital to the strategic interests of both the U.S. and state of Hawai'i. The BA is well positioned to provide expertise towards pressing challenges and opportunities confronting Oceania and its islands and peoples not found within the traditional disciplines by offering regional scale and interdisciplinary perspectives, often in close conversation with rare empirical, expert knowledge of the sociopolitical, historical, and cultural contexts of diverse Pacific Islands countries, territories, and states which will be critical towards success in any of the areas mentioned above. The BA is thus aligned with and supports the strategic mission, educational equity and workforce development goals of UHM, UH, and the State of Hawai'i, as well as the U.S. Department of Education and Department of State via faculty development of new courses in recent AY such as *China in the Pacific* and *Natural Resources and Economic Development in Oceania* alongside a BAM 4+1 pathway for high-quality BAs into the MA program, implemented in AY 2021-22.

While a small program, the Pacific Studies BA hits above its weight across UHM/UH institutional goals. Approximately 85% of Pacific Studies majors are underserved minorities. Most are transfer students from the UH system using articulation pathways from MSI CCs in place among 6 campuses since 2015. At the same time, undergraduate, graduate, and professional students from many departments take courses established to serve this BA to ground valuable empirical knowledge of this vast, globally significant region. With the introduction of the BA, the number of regularly offered undergraduate CPIS courses expanded from 3 in 2007–08 to 12 in 2020-21, with 16 declared majors in Fall 2021. Though the BA remains a small program which has not yet met its ten new majors/year benchmark goal from the original proposal, further growth expected as the PI student body grows, and as faculty pivot with the refreshed U.S. and HI state interests in the region.

Since its inception, DPIS has graduated 44 majors, the vast majority of whom have gone on to noteworthy jobs or advanced study drawing directly on the regional and Pacific Studies expertise developed through the BA—including permanent positions at the Bishop Museum, ‘Iolani Palace, HPD, HI DOH, HI DOE, and in government roles in home islands, among others. With the rapidly growing Pacific Islander student population, potential to infuse Pacific Studies expertise in the College of Arts, Languages & Letters, and contribute to advancing UHM as a Hawaiian place of learning acknowledging its place with Oceania, the BA will meet prior and generate new demand.

Establishing the Pacific Studies BA is cost neutral to UHM and UH. No additional resources are required to permanently establish this program. The small, committed and passionate, core-faculty of this BA are already established as a graduate faculty of a high-revenue relative to faculty-size generating unit through the valuable (approximately \$500,000/year) U.S. DOE Title VI National Resource Center successfully maintained since 1973, as well as U.S. National Science Foundation, and other significant grant funding. The establishment of this BA will materially and concretely demonstrate UH and UHM’s commitment to Area Studies of and within this region and support the success of this faculty in maintaining and increasing extramural funding which advances UHM and UH national and regional impact, relevance, and reputation. Moreover, permanently establishing the Pacific Studies BA provides an anchor for critical expertise, fosters coordination between affiliates and faculty in diverse units, advances educational equity for some of our state’s least served student communities via exceptional pathways between UH CCs and UHM, supports UHM’s national and international reputation as an institution providing educational pathways not available anywhere else, and advances a wide range of 21st-century workforce needs, including health sciences, STEM, diplomacy, education, defense, economics, and information technology, by complementing and enhancing the work of our students within the traditional disciplines with island-community-to-regional-scale expertise. By granting established status, UHM meets some of Hawai‘i’s fastest growing and least-served communities in their desire for critical scholarly recognition and educational equity and further advances strategic missions to develop our university as a Hawaiian place of learning noting traditional and contemporary genealogical, historical, and cultural ties between the Hawaiian Islands and communities across the region.

ACTION RECOMMENDED:

It is respectfully recommended that the Board of Regents grant established status to the BACHELOR OF ARTS IN PACIFIC ISLANDS STUDIES in the COLLEGE OF ARTS, LANGUAGES & LETTERS at the University of Hawai‘i at Manoa.

Attachments: Proposal for Request for Established Status for the BA in Pacific Islands Studies; [Provisional approval for the BA in Pacific Islands Studies](#)

cc: Executive Administrator and Secretary of the Board Kendra Oishi

Provisional to Established Status Proposal

Bachelor of Arts (B.A) Degree in Pacific Islands Studies

Department of Pacific Islands Studies
College of Arts, Languages and Letters
University of Hawai‘i at Manoa

March 2022



Request for Established Status Bachelor of Arts Degree in Pacific Islands Studies

Department of Pacific Islands Studies
College of Arts, Languages and Letters
University of Hawai‘i at Mānoa

1. EXECUTIVE SUMMARY

A special commitment to Pacific Islanders and their communities in Hawai‘i and beyond. Since the establishment of the Pacific Islands Studies program in 1950, the University of Hawai‘i has made a special commitment to the Pacific Islands region, its peoples, and their environment. Reorganized as the Center for Pacific Islands Studies (CPIS) in the 1970s, this unit has been the home for initiatives that bring together people and resources from across the University of Hawai‘i, region, and nation to promote an understanding of the Pacific Islands and issues of concern to Pacific Islanders. This includes critical efforts to improve recruitment and retention rates among students of Pacific ancestry, an underserved population at UH Mānoa. The ATP for the BA in Pacific Islands Studies was approved in 2009, and provisional status was approved in 2010. The degree was designed to respond to student demand¹ and meet the educational needs of underserved Pacific Islanders in the state of Hawai‘i through rigorous coursework, intensive community engagements and collaborations, and exposure to broad regional issues across the Pacific Islands, which bear on the past, present, and future of Hawai‘i and its peoples. In 2020, the BA program was reorganized along with the long-established MA program into a new Department of Pacific Islands Studies (DPIS). The BA serves the UH system by anchoring seamless educational pathways between the community colleges and UHM, fostering professional and scholarly development for students engaged with the Pacific Islands region in collaboration with other disciplines, and contributing to the strategic mission of the College of Arts, Languages & Letters (CALL) to reinvigorate and enhance its focus on Asia and the Pacific, an area for which UH is internationally known.

2. ALIGNMENT OF PROGRAM WITH MISSION AND STRATEGIC PLANNING OF THE CAMPUS AND UNIVERSITY SYSTEM

“We need to focus particularly on those who have been under-represented and for whom higher education can make the greatest difference. Educational disparities are most evident for the economically disadvantaged, those who live in more rural areas, and those under-represented in higher education including Native Hawaiians, Filipinos and **Pacific Islanders.**” (David Lassner, UH President)

¹ Surveys of students enrolled in PACS 108 in period preceding the provisional establishment of the PACS BA program indicated a strong interest in a BA or joint BA (27/70) in exemplar semesters, documented in the approved 2010 BA proposal, Appendix C.

The BA in Pacific Islands Studies directly addresses the pressing issues identified by President Lassner. It is well-aligned with and supports the strategic mission, and educational equity and workforce development goals of UHM, UH, and the State of Hawai‘i, as well as the U.S. This program supports University goals designed to address the educational inequity for Pacific Islander communities and students, it complements and extends student development to other units and colleges across the university. By providing courses with an island-community centered, island-to-regional scale, and regional community perspectives and empirical grounding, the BA advances opportunities for all UH Mānoa students to develop the expertise needed to meet the pressing challenges and opportunities confronting Oceania not found within the traditional disciplines. This is done by offering regional scale and inter-disciplinary perspectives, often in close conversation with rare empirical, expert knowledge of the sociopolitical, historical, and cultural contexts of diverse Pacific Islands countries, territories, and states which will be critical towards success in any of the areas mentioned above. The program contributes to efforts to make Mānoa a native Hawaiian and Pacific Islands place of learning, as well as a model indigenous-serving institution in a variety of ways including:

- More than 80% of our majors are heritage students, and most are the first in their families to attend college. The program serves as a home for students from across the US affiliated Pacific Islands and beyond, who receive extensive mentoring as they navigate their educational journeys.
- The BA courses also serve as a point of critical support for Pacific Islander students who are not PACS majors but are seeking to complement their disciplinary training with empirical and expert knowledge about their heritage communities, past and contemporary regional dynamics, and Pacific Studies scholarship emerging in our partner institutions across the region including the University of Auckland, Australian National University, Victoria University of Wellington, University of Otago, University of Guam, and the University of the South Pacific, among others.
- Approximately 72% of general education students who take undergraduate PACS classes are Pacific Islanders, and 38% are Native Hawaiian or Part-Hawaiian. Having dedicated faculty with deep ties and expertise in the Pacific region acting as mentors to Pacific Islands heritage students is a critical strategy for addressing the educational equity gaps for Pacific Islanders in the state of Hawai‘i.
- The recent UH Equity Leadership Acceleration Grant report to the Lumina and Rockefeller Foundations, demonstrated that between 2012 and 2017, the overall percentage of Pacific Islander students enrolling in higher education dropped in both the continental United States and in Hawai‘i. This decline was far greater in Hawai‘i (-39.4%) than on the US continent (-11.6%).
- Supports goals of the Department of Education and Department of State through the development of new courses such as *China in the Pacific* and *Natural Resources and Economic Development in Oceania*.

The University’s support of this program, which is guided by world-class faculty with regional and area expertise who share a profound commitment to the education and professional development of our Pacific Islander students and beyond, shows our shared commitment to address these pervasive, historically-grounded educational inequities.

3. PROGRAM ENROLLMENT AND GRADUATION OF STUDENTS

Since 2013, the number of majors each year has ranged from 13 to 20 (see Table 1). As of fall 2021, DPIS has graduated 44 students with a BA in Pacific Islands Studies. While the degree is a 4-year program, *the majority of PACS majors are transfer students from the UH system community colleges. We currently have six articulation agreements enabling seamless transfer pathways from the Community Colleges into the BA program.* The program serves as a significant pathway for students between the MSI community colleges and UHM and is a significant contributor toward system level goals to advance the educational equity of historically underserved and minority students from this region. If approved, the BA will provide substantial opportunities to advance new and much needed articulation agreements with partner institutions across the Freely Associated States (RMI, FSM, and Palau, as well as with partners in Guam, the CNMI, and American Samoa. Moreover, the BA program has been and, if approved for permanent status, will continue to provide substantial benefits and service to non-majors through diversification (genes) options as well as focus options covering *all* the required focus requirements in a subject content area that profoundly serves to advance the University’s commitment towards maintaining a Hawaiian place of learning which reflects Hawai’i’s place within the broader Pacific Islands regions. For many years all PACS courses contained focus designations including lower and upper division Writing Intensive, Ethics, Oral Communication, and a significant University mission serving HAP (PACS 108: Introduction to Pacific Worlds).

TABLE 1: PACS BA PROGRAM ENROLLMENT & COMPLETION (FY 2012-FY 2021)

	F12	F13	F14	F15	F16	F17	F18	F19	F20	F21
Projected Majors²	40	50*	60*	70*	N/A	N/A	N/A	N/A	N/A	N/A
Actual Majors³	7	14	19	13	19	19	20	15	15	16
Service to Non-majors⁴	176	178	167	155	174	162	148	111	93	144
BA Graduates	1	1	1	10	4	6	5	9	3 ⁵	3

Pathways Toward Employment. One of the ways we attempt to prepare our students for employment is to provide internships. Between spring 2016 and spring 2018, we provided 10 semester-long internships (requiring 140 hours) at the following places: Hawaii Community Development

² Multiply documented by the authors of the original 2010 BA proposal, the F13, 14, 15 projected majors lines failed to account for the subtraction of 10 majors per year, the complement of the expected 10 new majors per year. Incorrectly inflated counts of projected majors in Table 1 are marked with an asterisk.

³ Our data strongly suggests that the decrease in majors since S20 reflects pandemic-related effects including 7 approved leaves of absence (LOAs) in the four semesters F20, S21, F21, and S22. We note 3 of the students with approved LOAs returned in Spring 2022 and anticipate further returns.

⁴ Number of non-majors who have benefited from PACS undergraduate courses which might not otherwise exist.

⁵ PI communities were among those most impacted by the 2020 covid pandemic, the program’s students were not an exception, with over 85% of our majors as persons of regional heritage, graduate numbers in 2020 and 2021 may reflect unexpected impacts of pandemic.

Authority (HCDA), 'Iolani Palace, Fuetsan Famalao'an, Honolulu Museum of Art, UHM Hamilton Library, and the Honolulu Museum of Arts.

Related to this, are the numerous capstone and service-learning opportunities (approximately 700+ hours a year) that provide opportunities for students to be engaged in communities and apply their skills toward employment. In 2021-2022, new internship opportunities with the Pacific Forum, Pacific Islands Development Program, Hawai'i Council for the Humanities, and South Pacific Commission, among others are actively in development. The value of this BA's community-centered and community-engaged approach was freshly illuminated when one of its core courses was uniquely called out by name in the fall 2021 WASC Accreditation Report, "The institution provided many opportunities for students to connect their in-class learning to communities and industry at the undergraduate and graduate levels. One example is the Pacific Communities in Hawai'i course [PACS 301] that listed explicit learning outcomes and included a service-learning component that required a minimum of 15 contact hours within the community." In early 2022, the high impact of the BA program's active student professional development and cultivation was freshly brought into view when the Hawai'i Council of the Humanities featured its two fall 2021 interns, both Pacific Studies BA majors, in their [January newsletter](#).

Students Serving Community, State, and Regional Needs. Despite its current small program status, the BA in Pacific Studies has an impressive placement rate for recent graduates in the public and private workforce, and in pursuit of advanced study. Over 89% of our tracked alumni are gainfully employed in striking endeavors serving community, state, and national-to-regional needs. Of the 44 graduates, 20% work in education, 20% are employed at non-profit organizations, 12% work in media, 12% have returned to their island nations to serve in national government positions, 5% work for Hawai'i state agencies or local government, and 20% have gone on to pursue graduate studies. Across all of our graduates from 2012-present, it is easy to see the direct legacy of Pacific Islands Studies areal training and professional development provided by our program for our graduating majors in their diverse post-graduation employments including: government positions in the RMI, and FSM, U.S. Peace Corps, graduate degrees programs at UHM, NGOs in Hawai'i serving Hawaiian, Pacific Islander and other minority community youths such as the Estria Foundation, Pacific Forum, and EWC), HI DOE and private school educators including Kamehameha, postsecondary teaching at KCC, and even a celebrated up-and-coming journalist for [Civil Beat](#).

We have selected four students who exemplify some of the post-graduation patterns of local to regional, community to national, impact of our major. Our very first graduate, Nikola Komailevuka, class of 2012, is employed in her home of Fiji at the Foreign Policy Research Institute, after spending prior years at the Pacific Forum, a Honolulu-based foreign policy research institute focused on the Indo-Pacific which collaborates with a network of research institutes from around the U.S., the region, and globally. Teoratuuaali'i Morris, class of 2016, went on to complete the MA in Pacific Studies at UHM and then accepted the position of Bishop Museum Press Operations Manager. Chantelle Matagi, class of 2017, went on to the MA program and, early in the pandemic was offered a position as the Hawai'i State Department of Health Contact Tracing Lead Investigator for Pacific Islander communities, a position which requires exceptional knowledge of cultural and social protocols which can profoundly differ between distinct Pacific Islander communities. Exemplifying yet another pattern, Halia Hester, also class of 2017, turned her internship at 'Iolani Palace into a full-fledged career as Collections Manager, fulfilling a long-standing dream of contributing directly back to the Lāhui Hawai'i and our broader communities, bringing a foundation of sensitivity to the

Hawaiian Kingdom's relationships to neighbors and diverse histories of past and present engagements across the region.



4. INSTRUCTIONAL RESOURCES REQUIRED FOR THE PROGRAM AND THEIR UTILIZATION COMPARED WITH ANTICIPATED RESOURCES

The PACS BA Program Is Efficient and Cost-Neutral. The PACS BA program is efficient and could well be considered a “free” program. Allow us to elaborate. As seen in Table 4 (on page 10), row 1 shows that the BA courses have an average of 20 students per class, which is right-sized for a program of this nature which has many classes with a Focus designation, which restricts enrollments to 20 students. Rows 2 and 3 show the number of courses taught by *all* (7 total average) versus courses taught *only* by instructional faculty and specialists (6 total average). Nearly all courses are taught by faculty members. On average, only 4 teachers are providing the *entire* BA program curriculum, which speaks to the commitment of this small but active team. This same group of faculty also provide the historically impactful MA program in Pacific Islands Studies and serve as core faculty for the Center for Pacific Islands Studies, a US Title VI National Resource Center. Note the following which are not reflected in the row 4: 1) Teaching loads that include nearly all faculty teaching at the graduate level; 2) Faculty members taking on the role of Center Director; and 3) Running a program even when the number of faculty members dipped due to sabbatical (2015, 2016, and 2019) and sick leaves (2014 and 2018). Finally, row 5 shows the SSH total average and the SSH total average per teaching member for *all* (380 and 58 respectively), while row 6 indicates the SSH *only* for instructional faculty and specialists (300 and 82 respectively). By rough calculation the SSH/faculty ratio of **82** indicates that the BA is indeed a cost-effective unit. Again, note the following which are not reflected in the row 6: 1) The additional SSH for the graduate level, as well as faculty graduate responsibilities; 2) Numerous research and community initiatives by teaching members; and 3) Revenues received by the NRC grant. Here’s another way to consider this. Since the same faculty teach BA and MA students, not continuing the BA degree (and its SSH) will not make the department more cost-effective.

Instructional Resources. Currently, there are four G-funded faculty who collaborate with lecturers and GAs under the following program costs and resources (see Table 2, page 8 and Table 3 page 9). Moore hall houses the faculty and staff offices, which are shared by the Center for Pacific Islands Studies and the MA program in Pacific Islands Studies, as well as the instructional classrooms for both academic programs. Faculty include:

1. Lola Quan Bautista, DPIS Chair & Associate Professor; Expertise: Micronesian Diaspora, Pacific Islanders in Higher Education, Social Justice & Advocacy through Film, Gendered Space, Households, and House Forms;

2. Alexander Mawyer, CPIS Director and Associate Professor; Expertise: French Polynesia, Language & Culture in Oceania, Coastal and Marine Resource Governance, Biocultural Diversity, Anthropology of Place and Space; Conservation; Environmental Anthropology;
3. Tarcisius Kabutaulaka, Former CPIS Director & Associate Professor; Expertise: China in Oceania, Political Developments in Melanesia and Oceania, Land, Natural Resources, and Economic Development;
4. Julianne Walsh, Associate Specialist & Undergraduate Advisor; Expertise: Marshall Islands/US Relations; US Affiliated Micronesia; Compacts of Free Association; Educational Resources and Curriculum Development; Community Engagement including Internships and Service-learning.

TABLE 2: PROGRAM COSTS (2014-2023)

RESOURCES/ FUNDING	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022 (current)
Total cost (Projected)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total cost (Actual)	\$502,249.51	\$557,148.50	\$632,486.01	\$640,458.22	\$686,421.97	\$639,109.47	\$632,550.60	\$578,331.79
Faculty FTE (Projected)	--	--	--	--	--	--	--	--
Faculty FTE (Actual)	6.5	6.5	6.5	6.5	5.5	5.5	5	4
Faculty Salaries (\$) (Projected)	--	--	--	--	--	--	--	--
Faculty Salaries (\$) (Actual)	\$470,347.51	\$525,246.50	\$586,886.08	\$574,148.01	\$616,178.93	\$561,793.40	\$580,214.80	\$510,964.17
Lecturers (\$) (Projected)	--	--	--	--	--	--	--	--
Lecturers (\$) (Actual)	\$0.00	\$0.00	\$2,529.87	\$2,534.69	\$15,368.37	\$25,553.47	\$0.00	\$22,597.24
Graduate TAs (Projected)	--	--	--	--	--	--	--	--
Graduate TAs (Actual)	\$17,502.00	\$17,502.00	\$24,115.06	\$35,004.00	\$31,895.38	\$36,927.60	\$37,935.80	\$30,370.38
OPERATIONAL COSTS (Projected)	--	--	--	--	--	--	--	--
OPERATIONAL COSTS (Actual)	\$14,400.00	\$14,400.00	\$18,955.00	\$28,771.52	\$22,979.29	\$14,835.00	\$14,400.00	\$14,400.00

TABLE 3. ESTIMATED TUITION REVENUES BETWEEN AY 2013-14 AND AY 2021-22 (PACS BA).

Term	FTE	Tuition status				Fall tuition revenues	Term	FTE	Tuition status				Spring tuition revenues	AY	Annual tuition revenues
		resident	non-resident	Pac. Islander or non-resident Exempt	WUE exempt				resident	non-resident	Pac. Islander or non-resident Exempt	WUE exempt			
F13	13	7	1	3	2	\$ 78,112	S14	18	11	1	2	4	\$ 107,824	AY 13-14	\$ 185,936
F14	17	12	2	1	2	\$ 114,372	S15	17	11	3	0	3	\$ 126,423	AY 14-15	\$ 240,795
F15	11	6	2	0	3	\$ 90,127	S16	17	10	3	1	3	\$ 133,795	AY 15-16	\$ 223,922
F16	15	8	2	2	3	\$ 118,821	S17	16	10	2	1	3	\$ 124,687	AY16-17	\$ 243,508
F17	14	9	1	1	3	\$ 102,110	S18	14	10	1	0	3	\$ 102,110	AY 17-18	\$ 204,219
F18	17	10	1	1	5	\$ 121,230	S19	16	7	0	2	7	\$ 110,214	AY18-19	\$ 231,444
F19	13	2	0	2	9	\$ 98,910	S20	19	3	1	2	13	\$ 155,142	AY19-20	\$ 254,052
F20	12	2	1	2	7	\$ 98,622	S21	8	3	0	1	4	\$ 56,520	AY20-21	\$ 155,142
F21	9	3	1	1	4	\$ 73,188	S22	9	2	0	2	5	\$ 64,998	AY 21-22	\$ 138,186

Data source: The FTE and tuition status data have been retrieved from MIRO on 3/13/22

TABLE 4: NUMBER OF STUDENTS, NUMBER OF COURSES, NUMBER OF TEACHING FACULTY & SPECIALISTS, AND NUMBER OF SSH FOR DPIS UNDERGRADUATE PROGRAM (2012-2021)

		F12	F13	F14	F15	F16	F17	F18	F19	F20	F21	TOTAL AVG 2012-21
1	Average num. of students per class	23	21	18	20	23	15	19	18	20	24	20
2	Num. of courses* taught by <i>all</i> --instructional faculty, specialists, lecturers, and/or GA's combined	6	7	8	6	7	10	7	6	4	6	7
3	Num. of courses taught <i>only</i> by instructional faculty (F) and specialists (S) combined	4	6	8	6	6	8	6	5	3	3	6
4	Num. of instructional faculty (F) and specialists (S) teaching	4 (2F, 2S)	4 (2F, 2S)	5 (4F, 1S)	4 (3F, 1S)	4 (3F, 1S)	6 (4F, 2S)	4 (3F, 1S)	3 (3F, 0S)	2 (2F, 0S)	2 (2F, 0S)	4
5	SSH total and SSH average in parenthesis for courses taught by <i>all</i> --instructional faculty, specialists, lecturers and/or GA's combined	396 (66)	414 (59)	387 (48)	360 (60)	474 (68)	429 (43)	390 (56)	303 (51)	222 (56)	423 (71)	380 (58)
6	SSH total and SSH average in parentheses for courses taught <i>only</i> by instructional faculty and/or specialists	234 (59)	348 (87)	387 (77)	360 (90)	372 (93)	381 (63)	282 (71)	255 (85)	222 (111)	162 (81)	300 (82)

*This number does *not include* PACS399 Reading Course which are not regular classes with fixed capacity and often limited to one student and cross-listed courses (namely PACS371 and PACS462) in which the instructor was based in another department.

The PACS BA program supports UH/UHM success in Title VI recognition as a US DOE National Resource Center for Pacific Islands Studies. The new Department of Pacific Islands Studies' output of Pacific-related scholarly works as inherently tied to the Center for Pacific Islands Studies' long-standing community engagements have enabled access to federal grants targeting the rapidly increasing Pacific Islander population in Hawai'i and in the United States more broadly. Given its longstanding global reputation, CPIS remains the *only* National Resource Center (NRC) for the Pacific Islands region recognized by the US Department of Education. Funding for NRC and Foreign Language and Area Studies (FLAS) scholarships to UH is worth \$460,000 a year in the current 4-year grant cycle. These resources benefit numerous students and diverse programs across the UH system and the state, including Pacific Islander recruitment efforts and outreach, library resources, teaching resources and support for K-12 teachers, and support for state agencies (DOE, DOH) serving Pacific Islanders (see Figure 1). Because the NRC also supports the advancement of study abroad opportunities, the BA is a gateway through which UHM can pursue efforts to expand its scholarly and community engagements with Pacific Islands neighbors via the development and enactment of culturally responsive study abroad programs that are Island-centered, Islander-oriented, and impactful to both UH students and the state of Hawai'i (recent field-schools organized by CPIS/DPIS in the prior five years have been held in Samoa, Tahiti, and Palau). Critically, the BA provides a powerful and competitive rationale for sustaining the status of UHM as the home for the *sole* National Resource Center. NRC funds enable UH to participate in global activities to serve underrepresented students, to create resources to support education and awareness of the Pacific, and expand capacity to better understand and serve Pacific Islanders. The existence of the BA program, nearly unique in the United States, effectively illuminates and concretely represents our shared commitment to Pacific Areal and Language Studies and enhances CPIS competition in future NRC rounds.

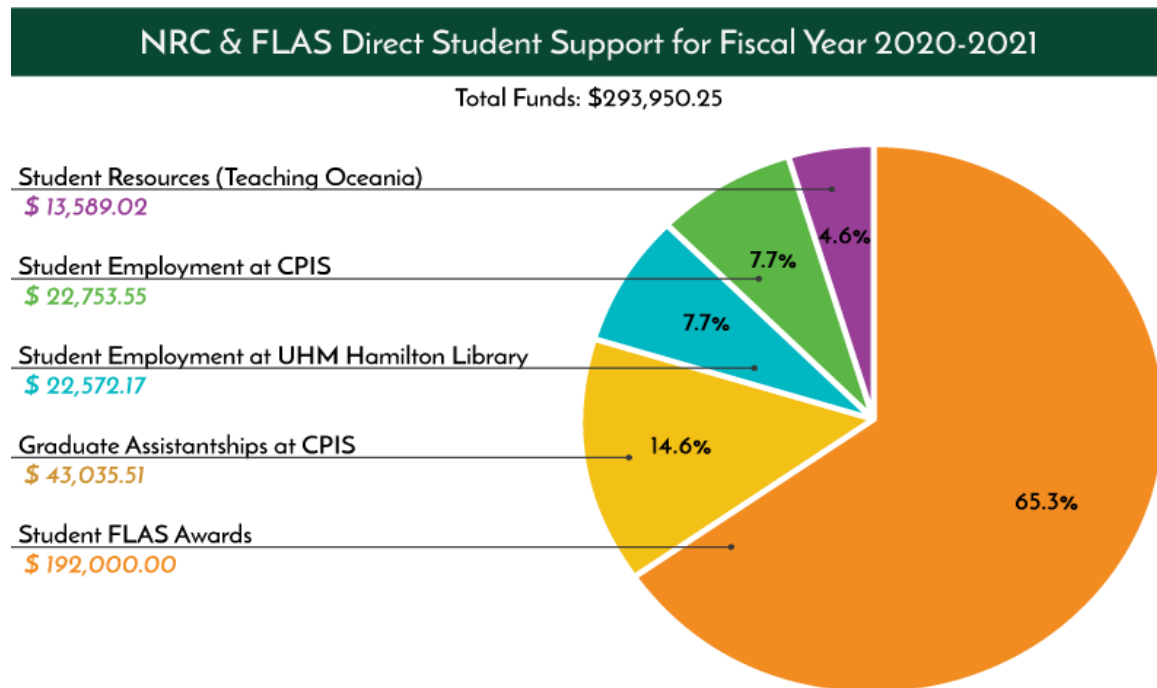


Figure 1

5. IS THE PROGRAM ORGANIZED TO MEET ITS OUTCOMES

The BA program in Pacific Studies is committed to UH Mānoa's mission to strengthen Mānoa as a Hawaiian/Pacific place of learning and we have adapted to meet student needs through collaboration with other units and coveted grant support.

Program Modifications. The provisional BA degree was approved by the Board of Regents in December 2010. It was designed to encourage concurrent degrees and support state needs through three concentration tracks: Public Policy and Community Development, Contemporary Regional Issues, and Arts and Performance. Students would not only complete 21 credit hours of unique Pacific Islands Studies interdisciplinary courses (PACS 108, 201, 202, 301, 302, 303 and 401) but further supplement with 15 credits in Pacific Islands related, discipline-focused work (Anthropology, History, General Pacific Electives and two concentration courses).

Curriculum changes. The original 6 concentration credits are now student-selected PACS elective credits. Further, we reduced requirement credits from 36 to 30 and removed requirements for specific courses to requirements to fulfill broader categories of courses. This shift supports student choice and enhances flexibility, especially for transfer students. The current requirements now include PACS 108, two 200+ level PACS courses, two 300+ level PACS courses and PACS 401. This in addition to one History, one Anthropology, and two Elective courses that are no longer strictly associated with particular concentrations.

Collaboration with other units. Faculty affiliated with the Center for Pacific Islands Studies have added new electives and cross-listed courses that serve PACS majors. Currently we have three cross-listed courses in Geography (333), English (371), and Theater (400). We have close ties to the College of Social Sciences Service Learning program to support students' service learning among Pacific communities. PACS courses also serve on elective lists for professional programs. For example, we have consistent enrollment of Public Health students in Pacific Communities in Hawai'i (PACS 301). In addition, we collaborate closely across UHM and support programs such as the Office of Multicultural Student Services in their recruitment efforts and other advocacy initiatives (tuition policy), by advertising opportunities for PACS student involvement and employment. Further, individual faculty regularly respond to requests by local and state agencies, providing opportunities to demonstrate the value of Pacific Islands Studies to our students and communities. (See letters of support in appendix).

Program Advising. The B.A. program requires students to consult on their curriculum plan every semester in consultation with the undergraduate advisor Dr. Julianne Walsh (Associate Specialist) who brings a nationally and internationally recognized expertise in educational resources, and curricular and pedagogical development, as well as community engagement including internships and service-learning. As noted above and in the accompanying memo, Dr. Walsh's own course in this program, and work in this area was highlighted in the recent WASC accreditation report. Students are able to access a description of the degree requirements through several sources, including via a department website with dedicated pages to undergraduate studies and resources, see <https://hawaii.edu/cpis/> and <https://hawaii.edu/cpis/student-life>.

6. EVIDENCE OF STUDENT LEARNING AND STUDENT AND PROGRAM SUCCESS

Assessment Activities. The BA in Pacific Islands Studies is regularly assessed. It has five student learning outcomes (Appendix 2) introduced, reinforced, mastered and assessed through the curriculum as demonstrated in the BA curriculum map (Appendix 3). Each of the SLOs is assessed in a cycle of approximately four years (Appendix 4) while the critical thinking and analytical writing SLO (4) is assessed every two years (to evaluate the "Write Oceania" program, see below). The program has also established a highly regular assessment framework for progressive improvement. Since the start of the degree program, the BA (and MA) assessment and faculty involvement have radically evolved. The faculty collected student work and actually developed the rubrics used for program assessment. Rather than a small group of faculty, *all* faculty, including the Director and Chair, read and scored *all* samples and changes were proposed when results did not meet expectations. For example, in 2014 because of deficits in SLO4 Critical Thinking & Writing Analytically, the "Write Oceania" Pacific Islands Studies writing program was born! This new program 1) integrated writing instruction across the curriculum through Writing Intensive courses, 2) advanced the rubric for SLO4, 3) solidified resources into an exceptional [website to support Pacific Studies student writing](#), (Appendix 5) created a position for grant-

funded GA since 2015, and 5) recognized as a successful model of how assessment can lead to program improvement after winning awards at the Assessment Office poster session and shared in multiple UH Assessment Institutes and in the online Learning Improvement Community [story page](#) (Appendix 5).

Time to Degree. On average, students take 4.5 years to complete the undergraduate program, while transfer students take slightly less at 2.4 years. To support transfer students entering Mānoa with AA degrees and majoring in PACS, degree program requirements were revised to eliminate the requirement for specific 200-level courses. As of fall 2020, transfer students and others could meet requirements by completing two 200-level or higher courses, thus eliminating a barrier of 6 credits of lower division courses that may have delayed academic progress.

The Capstone & Beyond. Every year, students enrolled in the capstone course present their culminating research projects at either a formal student conference or hold a community symposium (Appendix 6). The instructor for this course also mentors and trains students in writing and submitting grants. In fall 2020, five senior students were awarded the Undergraduate Research Opportunity Program (UROP) grant totaling \$8,490.00 to present their capstone research at two conferences in California (table 5). After the completion of the capstone project, some students have found employment in their respective research fields while others have continued onto graduate studies. A small but growing number of BA graduates (7 of 47) have pursued the MA in Pacific Islands Studies. We anticipate more students to pursue this pipeline as we have been approved to offer a 5-year BA/MA (BAM). We welcomed the first BAM student in fall 2021.

TABLE 5: SENIOR CAPSTONE STUDENTS UHM UROP AWARDS, FALL 2020

STUDENT	PROJECT TITLE	AMOUNT AWARDED
Alexander Makamae Kaupu	Supporting Kanaka Maoli Well-Being: Agency and Aloha ‘Āina	\$1,698.00
Kim Partner	Plants As Medicine	\$1,698.00
Solouta Togiaso	Utilizing Vā to Destigmatize Mental Illness in Pacific Islander Communities	\$1,698.00
Victoria Wonsowicz	Dancing Queens	\$1,698.00
Mupopo Savea	Health Issues Affecting the Samoan Community	\$1,698.00

7. CONCLUSION

U.S. Congressman Ed Case noted in 2021, “Over the past decade, the Pacific Islands have boldly pursued regionalism and cooperation to address the most pressing challenges they face, including climate change, sustainable development, public health, maritime security and more ... As a Pacific nation, the United States can and must contribute to regional efforts to address these issues.” To offer leadership and advance national priorities and strategic interests in the region, the U.S. requires continuing support and national investment in area expertise. Permanently establishing the Pacific Studies BA provides an anchor for critical expertise, supports UHM’s national and international reputation as an institution providing educational pathways not available anywhere else, and advances a wide range of 21st-century workforce needs, including health sciences, STEM, diplomacy, education, defense, economics, and information technology, by complementing and enhancing the work of our students within the traditional disciplines. By granting established status,

UHM meets some of Hawai'i's fastest growing and least-served communities in their desire for critical scholarly recognition and educational equity and further advances strategic missions to develop our university as a Hawaiian place of learning noting traditional and contemporary genealogical, historical, and cultural ties between the Hawaiian Islands and islands and communities across the region.

Appendix 1: Letters of Support

March 11, 2022

To whom it may concern,

I am writing to express my sincere support that the Pacific Islands Studies' undergraduate program become an established and permanent program offered at the University of Hawai'i at Mānoa. I do so as a former student with a strong belief that this program is unique and has benefited my life in profound ways, both professionally and personally.

Between 2011 and 2015, I was among the earliest students who completed the Pacific Islands Studies BA program. I later completed the MA program at CPIS between 2018 and 2019, and shortly after graduation, I secured employment at Honolulu's Bernice Pauahi Bishop Museum, where I continue to work today as the operations manager of the historic Bishop Museum Press.

It has been expressed to me that my degrees gave me a professional advantage and made me an extremely competitive candidate for the Museum. This represented a recognition from the hiring committee that Pacific Islands Studies scholars, in addition to having a broad understanding of the histories, cultures, and contemporary issues of Oceania, are trained to have a keen sensitivity to issues of representation and equity. These are invaluable skills to institutions and organizations that must grapple with these issues daily and this is especially true for Hawai'i museums, where visitors, donors, and stakeholders often are the descendants of the histories and cultures being portrayed.

In addition to my work in the Press, my education granted me the unique invitation to join the curatorial team for an upcoming Bishop Museum original exhibition in June 2022. Over the two-year planning process for this exhibition, I have experienced many instances where my educational background allowed me to make significant contributions and to raise issues that others may have missed. My former training has given me the insight to recognize when the peoples and struggles of Oceania are insufficiently represented and how to attempt to address them. Importantly, it has given me the confidence and the intellectual foundation to express myself and excel in these collaborative spaces. For this, I owe much to the critical thinking and writing skills I acquired through my BA program.

Considering its legacy, aspirations, and quality of research, I genuinely believe that UH's Center for Pacific Islands Studies is one of the astounding (yet less visible) contributions that the University of Hawai'i makes to the region and the world. Both the Center and the Department are beacons in a field that continues to be more relevant every day. I urge the Board of Regents to expand the impact that Pacific Islands Studies has on Pacific Islander and non-Pacific Islander students that attend UH through the permanent establishment of the BA degree in Pacific.

Thank you for considering my words of support,

Teora Morris

Teoratuuaarii Morris
Bishop Museum
Press Operations Manager

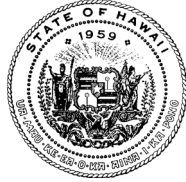
45-592 Paleka Road Unit C
Kāneʻohe, HI 96744
W: 808.848.4126
C: 808.348.1154

Teoratuua@gmail.com
Teora.morris@bishopmuseum.org



 **Teoratuuaarii Morris**
Operations Manager
Bishop Museum Press

BISHOP MUSEUM
T 808.848.4126
teora.morris@bishopmuseum.org
bishopmuseumpress.org
1525 BERNICE STREET • HONOLULU, HAWAII 96817



**STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378**

Letter of Support for the Center for Pacific Island Studies Bachelor's Program

March 11, 2022

Alexander Mawyer, PhD, CPIS Director, Acting DPIS Chair and Associate
Center for Pacific Islands Studies
University of Hawai'i at Mānoa
Honolulu, HI 96822

Dear Director Alexander Mawyer:

I am honored to stand together in support of the Center for Pacific Islands Studies (CPIS) Bachelor's program at the University of Hawai'i at Mānoa.

As a graduate of the CPIS BA program I would like to share how the interdisciplinary courses I took as an undergraduate student have assisted, prepared, and guided my professional career. I am an older student and when I returned to school to complete a degree in business management, I did not imagine that two semesters later I would be changing my educational path and professional journey. During my second semester I took a Pacific Island studies course as an elective. I am Samoan and Syrian but as a child I was raised on the continent and was eager to expand my knowledge. As I connected with my Pacific roots, I became enthralled with learning but also, I felt a sense of empowerment as I learned about the greatness of those who came before me and the challenges they experienced. I changed my major and added eighteen months of additional course work.

As CPIS is an interdisciplinary program, I was able to take classes that provided me meaningful engagement and a knowledge base that few others have. My classes focused on history, anthropology, political science, art, language, economics, and health. This is important as it gave me context and understanding to what is happening in the world and why. I did not realize then how important this would be, but I felt an enormous amount of pride in what I had learned.

In March 2020, the world as we know it changed and the COVID-19 pandemic began. I lost my job due to the pandemic and was unsure what I would do moving forward. In August of 2020, then State Epidemiologist Sarah Park in a news conference shared that Native Hawaiians and Pacific Islanders were overly affected by COVID-19. When asked what she could do to address this, she stated that nothing could be done as the state of Hawai'i Department of Health (HDOH) was unable to find or hire qualified Native Hawaiians and Pacific Islanders to work as COVID-19 case investigators. This was upsetting to me and because of this I enrolled at the University of Hawai'i West Oahu Contact Tracing program. As the program was meant for public health professionals and educators there was some question as to if my degree would give me the foundational knowledge necessary to be become a case investigator. I was admitted to the program due to my grade point average and lived-life experience

It soon became apparent that not only did I meet the standard qualifications necessary but that my interdisciplinary education gave me an advantage. I understood and could explain the historical context that led to Native Hawaiians and Pacific Islanders being overly represented in COVID-19 positive cases. Sadly, Native Hawaiians and Pacific Islanders share a colonial history that has created and supported generational trauma. This trauma can be seen in the socio and economic disparities they suffer and the distrust they have of western government agencies, their agents, and western medicine. This means that Native Hawaiians and Pacific Islanders were already suffering prior to the pandemic and that the pandemic further exasperated the already present disparities and inequities. This knowledge gave me a unique perspective, but it also allowed me to create solutions that addressed these issues. I completed the contact tracing program and applied for a position at HDOH. To my surprise I was hired as the Lead Case Investigator for the newly created Native Hawaiian and Pacific Islander Contact Tracing Team (Team 6B).

As I began to build Team 6B, I understood that my team had to be representative of the communities I was being asked to assist. And unlike the now fired Sarah Park, I knew that there were qualified Native Hawaiian and Pacific Islander applicants. I hired 15 team members who represented those Pacific communities who needed them the most. I then worked with community-based organizations (CBOs), faith-based institutions, medical providers, social services, and advocates to create educational outreach that was in-language and culturally appropriate. Engagement had to be innovative, inclusive, and it had to be in partnership with community-led initiatives. When I began in October 2020 Native Hawaiians and Pacific Islanders accounted for approximately 50% of the positive cases statewide, despite representing approximately 25% of the population. Today Native Hawaiians and Pacific Islanders are approximately 25% of the positive cases statewide. This is an impressive drop and one that could not have been accomplished with the now 32 team member strong Team 6B.

I am very proud of this work and am humbled to report that this work has been documented locally and worldwide. Under the supervision of Sarah Kemble MD, PhD, HDOH State Epidemiologist and Chief of HDOH Disease Outbreak and Control Division, HDOH has documented these innovative practices including the formation of Team 6B and published some of their findings in the “COVID-19 in Hawai’i: Addressing Health Equity in Diverse Populations” article. This article was then chosen by the CDC and was the basis of an MMWR article titled, “Disaggregating Data to Measure Racial Disparities in COVID-19 Outcomes and Guide Community Response – Hawaii, March 1, 2020 – February 28, 2021.” The CDC then cited HDOH health equity work to the WHO in their article “Promoting health equity during the COVID-19 pandemic, United States.” I am listed as a co-author on each of these and my affiliation is listed as the Center for Pacific Islands Studies.

CPIS provided me Pacific histories in a pedagogy that recognizes, supports, and celebrates Pacific cultures such as the one Epli Hau’ofa described in his widely quoted and assigned reading by CPIS essay “Our Sea of Islands.” As a Pacific student, CPIS provide me culturally grounded knowledge and skills, that I took into my professional career and utilized. CPIS allowed me to proclaim the greatness of Pacific Islanders through their course curriculum, and it created a pathway in which that greatness was attained professionally for me. I would kindly suggest that doing away with a program that has been so instrumental in the saving of lives during the pandemic would be short sighted and detrimental.

Fa'afetai ma le
fa'aaloalo lava,
Chantelle Eseta
Matagi

State of Hawaii Department of
Health COVID Vaccine
Community Outreach Liaison

Appendix 2: Student Learning Outcomes (SLO) and Program Outcomes

PROGRAM OUTCOMES	
BA SLO1	Students can describe the diversity and similarity of issues in Oceania.
BA SLO2	Students can identify major events in the history of the region and analyze processes of change in island societies.
BA SLO3	Students can research and communicate indigenous issues and concerns.
BA SLO4	Students can demonstrate critical thinking and write analytically.
BA SLO5	Students can interact with and advocate for Pacific Island communities at home or abroad.

Appendix 3: Curriculum Map I (Introduced), R (Reinforced), M (Mastered), A (Assessment)

CRN	PACS COURSES	SLO1	SLO2	SLO3	SLO4	SLO5
108	Pacific Worlds	I	I	I	I	I
201	Islands of Globalization	I/R	I/R	I/R	I/R	I
202	Pacific Movement & Migration	I/R	I/R	I/R	I/R	I/R
301	Pacific Communities in Hawai'i	I	I/R	R	R	R
302	Contemporary Issues in Oceania	R/M	R	R	R	
303	Pacific Arts Ritual Performance	R	R	R	R	R
401	Senior Capstone			M/A	M/A	M/A
492	Topics: Language & Culture	R		R/A	R/M	R
493	Moving Images	R		R/M		

Appendix 4: PACS BA Assessment Cycles & Program SLOs Assessed AY 2011-2021

Academic Year	Program SLOs Assessed
2011-12	3,5
2012-13	3,5
2013-14	2
2014-15	1,4
2015-16	5
2016-17	4,6
2017-18	1
2018-19	3,4
2019-20	2,5

Note: Annual assessment reports for the BA degree are publicly available on the Assessment Office website. The PACS assessment coordinator has been an assessment institute fellow (AIF) for the past two years, after participating in the institute and other related activities since 2015.

Appendix 5: Writing Assistance for PACS Undergraduate Students



Shannon Hennessey



Julianne Walsh

Appendix 6: PACS Fall 2021 Capstone Student Presentations




PACS 401: COMMUNITY SYMPOSIUM

Come listen to UH Mānoa PACS 401 students present their community-guided capstone projects!

SUNDAY, DECEMBER 5, 2021
2pm-4pm HST

LIVE <http://go.hawaii.edu/ZDV>



TAUFA SETEFANO

Tongan Culture in Siasi Katolika: East Bay Tongan Catholic Komunio

Taufa's research focuses on how Tongans in the Bay Area maintain *anga fakatonga* (Tongan identity) in actively participating in Siasi Katolika Komunio (Catholic Church communities). She explains how these Catholic churches become villages where Tongan culture is practiced through teaching the three main values of *kainga* (community), *fai lotu* (prayer), and *foaki 'ofa* (labor of love). Taufa has grown up in Tongan Catholic Church communities since her upbringing in Maui, Hawaii, and presently in the Bay Area. Through *talanoa* interviews and recordings, she works closely with the Tongan Catholic Chaplaincy and Siasi Katolika Kosilo (council) first established in the East Bay to document the beginnings of these Tongan villages.

For more information, please contact:
lalab@hawaii.edu




PACS 401: COMMUNITY SYMPOSIUM

Come listen to UH Mānoa PACS 401 students present their community-guided capstone projects!

THURSDAY, DECEMBER 9, 2021
2pm-4pm HST

LIVE <http://go.hawaii.edu/VDL>



KAUTIOUS LATHAM

A Demand for Attention in The Lack of Access to Disaster Preparedness for Deaf Pacific Islanders

KAUTIOUS: I gravitated my research around the lack of access provided for Deaf Pacific Islanders in the deaf community, whether that may be here on Oahu or other places in the Pacific, and how they prepare for natural disasters such as tsunamis, volcanic eruptions, hurricanes, and much more. I have worked hand in hand with the Center of Disability Studies at the University of Hawaii at Mānoa. Together they are looking at the Deaf community in America Samoa and how they prepare their community for disaster preparedness. By doing so, I hope to find any *pulaka* that demand to be addressed and create possible solutions that could apply to all Deaf Pacific Islanders in Oceania about disaster preparedness.



MIKAELYN MARIE MENO GOGUE

Ti Hu Tu go Hai'i Guahu: Diasporic Chamorro Culture, Identity, and Community in Online Spaces

MIKAELYN: Post, like, share, subscribe are all readily common verbs within this day and age. Since the turn of the 21st century, social media has exploded into becoming one of the main sources of information, connection, and entertainment. Following the emergence of social media, there have been waves of preferred forms of social media and what its intended use should or can be. The ways in which people consume social media varies heavily depending on their age, gender, cultural group, and more. Chamorros, the indigenous people of Guahan or Guam, are among the lengthy lists of cultural groups in Oceania that utilize online spaces in a multitude of ways. This essay will aim to address the ways in which Chamorros in the diaspora utilize social media and online spaces as a means for cultural preservation. Because as a popular diasporic group where a majority of the indigenous population lives away from their homes, it is crucially important to examine the ways in which they are able to uphold their culture from so far away. Additionally this piece will acknowledge the heavy influence that COVID-19 has presented towards Oceania communities and how it has affected Chamorros in online spaces.

For more information, please contact:
lalab@hawaii.edu




PACS 401: COMMUNITY SYMPOSIUM

Come listen to UH Mānoa PACS 401 students present their community-guided capstone projects!

FRIDAY, DECEMBER 10, 2021
6pm-8pm HST

LIVE <http://go.hawaii.edu/VDU>



ISABELLA KE'ALOHILANI PARK-ROBERTS

Kūlia i ka Nūu: Hawaiian Youth and How They Revitalize 'Ōlelo Hawai'i Through Competition

ISABELLA: Bella's research focuses on the participation of Hawaiian youth in the 'Ōlelo Hawai'i Indigenous Language category of the Hawai'i Council for the Humanities' Hawai'i History Day. This semester, Bella was able to work with the Hawai'i Council for the Humanities, meet with current and potential judges for the Language Category, and connect with students and teacher in the 'Ōlelo Hawai'i community that are participating in Hawai'i History Day. This project centers around the question, "How does competition promote language revitalization in Hawaiian Youth?" Through fruitful connections and many many meetings, Bella was able to study indigenous types of competition, and how those continue to encourage youth in Hawai'i to strive for excellence in language from across the *Pae'āina*.



KALEI PEMBER

The Proof is in the Pa'i'a: Hawai'i's Answer to Food Sovereignty is Found in the Past

KALEI: With the current global pandemic Hawai'i food supply and food availability has been drastically impacted. This semester, Kalei worked with Kālo'a 'Ōiwi, a non-profit organization that is working to restore ancestral farmlands utilizing cultural practices, agriculture, education, and natural-resource restoration and management. Kalei's research focuses on food sustainability and food sovereignty for Hawai'i through the cultivation of taro farmlands and fishponds by utilizing ancestral practices.



KAHI EHIA-SALVADOR

Correctional System or Penal System?: Native Hawaiian Values as an Alternative to Rehabilitate Native Hawaiians Incarcerated

KAHI: Kahi focuses his research on the voices of the incarcerated and the programs that are influential to their rehabilitation. Kahi works with the Hawai'i Humanities program "Try Think Hūlūhā." Where he can capture the voices of the incarcerated at Hiloava Correctional Center as well as the general community. He highlights the issues with historical and generational trauma. As well as modern issues that jumpstart the younger generation into the prison system. However, by utilizing Hawaiian cultural practices and values as a way to heal the incarcerated Native Hawaiians, we can help heal the damages of historical trauma caused by colonization.

For more information, please contact:
lalab@hawaii.edu



UNIVERSITY
of HAWAII
HILO

UNIVERSITY OF HAWAII
BOARD OF REGENTS


'22 APR 27 A9:19


March 11, 2022


MEMORANDUM


TO: Randolph G. Moore, Chair
Board of Regents

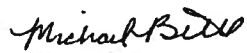
Ernest Wilson, Chair
BOR Committee on Academic and Student Affairs

VIA: David Lassner 
President

VIA: Debora Halbert 
Vice President for Academic Strategy

VIA: Bonnie Irwin 
Chancellor

VIA: Kris Roney 
Vice Chancellor for Academic Affairs

FROM: Michael Bitter 
Interim Dean, College of Arts & Sciences

SUBJECT: REQUEST FOR ESTABLISHED STATUS FOR THE MASTER OF ARTS IN HERITAGE MANAGEMENT AT
THE UNIVERSITY OF HAWAII AT HILO

SPECIFIC ACTION REQUESTED

It is respectfully requested that the Board of Regents grant established status to the Master of Arts in Heritage Management in the College of Arts and Sciences at the University of Hawai'i at Hilo.

RECOMMENDED EFFECTIVE DATE

Effective upon Board approval.

ADDITIONAL COST

There are no additional costs associated with this request.

PURPOSE

The University of Hawai'i at Hilo (UHH) Anthropology Department's MA in Heritage Management (HMMA) was created in response to House Resolution No. 130 of the 24th Legislature (2008) to address a critical shortfall in heritage management professionals in Hawai'i, a shortfall that continues to the present. The program fills a clear need to provide graduate training in the specific issues of Oceanic heritage. Despite challenges in staffing, the HMMA program has managed enrollments and successfully graduated students, who have taken leadership positions in the professions identified in the original House Resolution. In addition, it has generated grants and partnerships that far exceed the expectations for a program of its size.

BACKGROUND

Pursuant to Board of Regents Policy 5.201: instructional programs, "The board shall determine whether [a] program is to be awarded established status or terminated."

The Master of Arts in Heritage Management responds to the severe and continuing shortfall in professionals by providing the academic credentials necessary for its graduates to serve in heritage leadership positions in organizations across the state of Hawai'i. Graduates have successfully sought positions in key agencies and firms that require advanced training in Cultural Resource Management.

Critically, this program empowers descendant community members in the management of their own heritage and prepares its graduates for careers in government agencies, private-sector consulting firms, and education.

Owing to a smaller than projected faculty, the program enrolls fewer students than originally proposed. The Anthropology department, in which HMMA is located, has successfully managed both this smaller graduate enrollment and their undergraduate responsibilities in general education and the Anthropology baccalaureate major by moving to an alternating-year admissions cycle for the MA program, in order to assure that all of their curricular responsibilities can be met.

At the same time, HMMA has cultivated extensive extramural support and partnerships, with nearly \$5 million in external funds through collaborative programming, as well as a \$1.25 million MOU with the Department of Transportation in partnership with Ka Haka 'Ula o Ke'elikolani College of Hawaiian Language, and other externally funded programs that provide support to the students in the HMMA program.

The continuing need for heritage management professionals is documented in the attached proposal and letters demonstrating community and government agency support for this program. As one of UH Hilo's signature programs, the Master of Arts in Heritage Management meets the needs of our community and state by preparing our students for positions of leadership that they could not otherwise attain.

HMMA is central to the identity of the University of Hawai'i at Hilo as an indigenous serving and community-engaged campus. The hands-on experience offered by this program, combined with rigorous research project and thesis requirements, provide its students with a rich educational environment that allows them to develop the leadership skills necessary for success in their future careers in cultural resource management both within the State of Hawai'i and across the Pacific region.

ACTION RECOMMENDED

It is recommended that the Board of Regents grant established status to the Master of Arts in Heritage Management in the College of Arts and Sciences at the University of Hawai'i at Hilo, effective upon Board approval.

Attachment: Proposal for Established Status



UNIVERSITY of HAWAII®
HILO

Master of Arts in Heritage Management Degree Program

Department of Anthropology

HERITAGE MANAGEMENT

Anthropology Department
University of Hawai'i at Hilo



Proposal for Established Status

Table of Contents

1. Program Overview	4
2. Alignment of program with mission and strategic planning of the Campus and University System	5
Relationship to University mission and development plans	5
Evidence of continuing need for the program	6
Projections of employment opportunities for graduates, etc.	6
3. Program enrollment and graduation of students: anticipated and actual enrollment figures	7
Analysis of numbers of majors, graduates, service to non-majors	7
Employment of graduates	9
4. The instructional resources required for the program and how they were utilized compared with anticipated resources	10
Analysis of number and distribution of faculty	10
Budget and Sources of Funds	11
Facilities and Equipment	14
5. How the program is organized to meet its outcomes	15
Differences in the program from what was approved by the Board of Regents including any changes in curriculum requirements from what was proposed	15
Assessment of productivity and cost/benefit considerations within the overall context of campus and University "mission" and planning priorities	16
Quantitative measures	17
6. Evidence of student learning and student and program success	17
Summarize the assessment of whether or not students meet the program outcomes and the evidence used to reach this conclusion	17
Data on time to degree trends, retention and actions to increase retention and on time graduation	19
Indicators of program quality, e.g. accreditation or other external evaluation, student performance on external exams, student employer satisfaction, alignment with Hawai'i economic demand, employment/graduate school trends of graduates, awards to faculty and students, etc.	19

<i>APPENDICES</i>	20
APPENDIX A: Catalog Description	20
APPENDIX B: List of Faculty and Area of Expertise	21
APPENDIX C: HMMA Program Curriculum	22
Appendix D: Letters of Support	24

1. Program Overview

The University of Hawai'i at Hilo (UHH) Anthropology Department's MA in Heritage Management (HMMA) responded to House Resolution No. 130 of the 24th Legislature (2008) regarding a critical shortfall in heritage professionals in Hawai'i, which continues to the present. The program fills a clear need to produce individuals who are well-trained in the specific issues of Oceanic heritage. The region has unique cultural, historical, social, and environmental characteristics that make localized training more effective. The MA provides affordable and regionally-focused graduate training with specializations in applied archaeology and cultural impact assessment in keeping with the proposed CIP code¹. It empowers descendant community members in the management of their own heritage and prepares students for careers in governmental agencies, private-sector consulting firms, and in education (Appendix A).

The MA program also takes advantage of the strong ties with UHH's College of Hawaiian Language, Ka Haka 'Ula O Ke'elikōlani (KHUOK). Program support is broadly integrated with partner organizations in the community. Although the program focuses on Hawai'i, we address Pacific Islands heritage management in general, and have recently admitted indigenous graduate students working on projects connected to American Samoa, the Marshall Islands, and Yap. UHH, with its diverse Pacific Islander student body, presents one of the best settings for having Pacific Island students trained in Cultural Resource Management (CRM) methods.

The anthropology department currently consists of six tenure-track faculty and two part-time lecturers. The original proposal envisioned eight full-time positions in the department in addition to the lecturers, and an APT to cover graduate and undergraduate teaching loads and administration. Enrollment projections have been adjusted to account for the reduced faculty and staff while we

¹ Current CIP Code 30.1202

Title: Cultural Resource Management and Policy Analysis.

Definition: A program that focuses on the application of cultural studies, public policy analysis, and management skills to planning, promoting, and implementing programs to preserve and protect cultural heritage sites and artifacts. Includes instruction in historical preservation and conservation, business management, policy analysis, applied economics, public relations, applied history, historical archaeology, and environmental impact studies.

continue to work with university administration to address staffing needs. Kamehameha Schools (KS) funded one faculty position for five years through a cooperative agreement, and continues to offer other forms of support and opportunities to our graduate students. Nearly \$5 million in additional external funds have been secured through collaborative programs with Kaloko-Honokohau National Historic Park, Ala Kahakai National Historic Trail, Pu‘u Honua o Honaunau National Historic Site (\$479,000), and an MOU with the Hawai‘i Department of Transportation (\$1.25 million) as stipulated in a Memorandum of Agreement for the Queen Ka‘ahumanu Highway realignment, which is being managed jointly with Ka Haka ‘Ula o Ke‘elikolani College of Hawaiian Language. Additional funding through the NSF IOA-LSAMP program (\$3.9 million), and the NIH SHARP program have helped fund various aspects of the program. Ongoing plans to construct a heritage collections facility on campus through funding secured by the Hawai‘i State Historic Preservation Division (\$32 million) increases opportunities for collaboration with State of Hawai‘i preservation goals.

2. Alignment of program with mission and strategic planning of the Campus and University System

Relationship to University mission and development plans

The MA in Heritage Management is aligned with the strategic vision and goals of University of Hawai‘i at Hilo and of the University of Hawai‘i system as an indigenous serving institution. *A‘ohe pau ka ‘ike i ka hālau ho‘okahi* (One learns from many sources) is the current mission statement for UH Hilo, which is specifically clarified in the UH Hilo online catalog by the statement “to challenge students to reach their highest level of academic achievement by inspiring learning, discovery and creativity inside and outside the classroom. Our kuleana (responsibility) is to improve the quality of life of the people of Hawai‘i, the Pacific region and the world.” Heritage is at the center of the quality of life for peoples of the Pacific, and investing in programs that increase the ability of graduate students from descendant communities to obtain leadership positions in heritage management is at the core of this mission. UH Hilo is well-positioned to support these unique responsibilities as part of the public university system in Hawai‘i, providing an affordable, high-quality education that leads to such opportunities.

The UH Hilo vision statement “*E lawe i ke a‘o a mālama, a e ‘oi mau ka na‘auao*” (Those who take their learnings and apply them increase their knowledge) is also at the heart of the heritage management program, with each student developing a community-based thesis project as the centerpiece of their MA degree, where heritage theory flows directly to Community-based

participatory research (CPBR) in an applied learning context. Beyond the thesis itself, six (6) credits of the 36-credit program involve placing students in community internships with a heritage-related organization.

Evidence of continuing need for the program

The ongoing need for heritage management professionals with community-based training is well expressed in the attached letters of community and government agency support. The Hawai'i State Historic Preservation Division continues to have vacancies for positions that it cannot fill without appropriately qualified applicants. Several impacts of global warming are also putting cultural sites at increased risk, and generating a need for increased employment. Rising sea-levels (most important in the Pacific), increased wildfires in the American West, and melting glacial ice are all exposing large numbers of burials and cultural sites that federal and state land managers around the globe are scrambling to address. In a local example, three out of the five seats on the Molokai Burial Council are vacant and the panel has not had enough members to meet for years. One of our MA graduates, Kalena Blakemore, serves on the Hawai'i Island Burial Council where there have been two standing vacancies for several years, and a recent news story published in all the major Hawai'i newspapers (Jan. 19 and Jan 20, 2021) points to the state's failure to provide training to the understaffed councils.

Projections of employment opportunities for graduates, etc.

In Hawai'i, State regulations (Title 13, Subtitle 13, Chapter 281) require Principal Investigators in private consulting firms to have graduate degrees in Heritage Management, and various government organizations also require graduate degrees for historic preservationists on their staff to meet federal and state requirements. For example, principal investigators working for one of the 27 firms licensed to conduct archaeological research must possess "a graduate degree from an accredited institution in archaeology, or anthropology, with a specialization in archaeology, or an equivalent field." Undergraduate students continue to find employment (at lower pay scales than principal investigators) in heritage management across Hawai'i and the Pacific even before they graduate or soon after, but without providing local opportunities to achieve these degrees, many UH Hilo undergraduates hit 'glass ceilings' in their careers. In addition to private consulting firms, federal agencies dealing with the erosion of cultural sites along shorelines are facing increased demands for site identification and stabilization work across the Pacific. The key issue is that without local graduate training, the PIs at the firms and government agencies receive training elsewhere and lack

the strong community connections necessary to the work and as envisioned in the state regulations. Such disconnections only add to the distrust that frequently accompanies governmental evaluation of cultural sites during state or federally-mandated project reviews.

Beyond archaeological site preservation, state and federal laws have placed an increased emphasis on intangible cultural resources. Hawai'i now regularly requests the completion of "Cultural Impact Assessments" under Chapter 343 of HRS to assess the impact of a proposed development on resident communities. These assessments require principal investigators with graduate degree training in traditional languages, conducting oral histories, and doing ethnographic fieldwork, all of which are part of our MA program. Lokelani Brandt (see attached letter), is one example of one of our MA graduates who is now a PI, and who does cultural impact assessment work. Most of the 27 companies operating in the state are looking for additional PIs who could do similar work.

3. Program enrollment and graduation of students: anticipated and actual enrollment figures

Analysis of numbers of majors, graduates, service to non-majors

The Heritage Management MA program has not met enrollment targets (Table 1) due primarily to shortages in projected faculty. The department is operating with the same number of faculty it had before the graduate program, and HMMA graduate students arrived at a time when university-wide undergraduate enrollment (including anthropology) was dropping. Further, only four of the six current anthropology faculty, 4 tenure-line and 2 lecturers, have specialties that allow them to regularly advise students in the graduate program (Appendix B; a fifth faculty member, Dr. Lynn Morrison, has advised one student and a lecturer, Dr. Timothy Scheffler, regularly teaches courses in Qualitative and Quantitative Analysis [ANTH 603] and Human Paleoecology [ANTH 613]). The two tenure-line additional positions that were included in the 2014 BOR proposal that have not been filled as anticipated, so the department made the intentional and strategic decision, with the support of Administration, to keep the cohorts small to better serve both the graduate and undergraduate students. As a result, the existing faculty have successfully managed both the smaller pool of graduate students and the undergraduate program, in part by reducing the incoming cohorts of HMMA and admitting students only in alternating years. As an example, the anthropology FTE undergraduate student-faculty ratio the year before the creation of the MA program was 18.6. In the current year, that ratio remains at 18.4 (Table 3g, Program Review <https://hilo.hawaii.edu/uhh/iro/ProgramReview.php>).

The results of the program review provide the opportunity in the to further evaluate an internal redistribution of effort in order to increase the graduate program enrollments in coming years without adversely affecting the undergraduate programming for majors and non-majors. These efforts will permit the program to accept larger cohorts from the applicant pools that run double the number of acceptances and the potential applicants who have been dissuaded by the present small cohort size.

Table 1: Projected Enrollment

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Current Year
	15-16	16-17	17-18	18-19	19-20	20-21	21-22
Projected Enrollment	8	17	18	18	18	18	18
Actual Enrollment	7	7	10	7	11	7	9

Notably, of the first four cohorts of students, 14 are of Hawaiian ancestry (60.8%), three others are from other Pacific Islands (13%), and 19 are women (82.6%).

Each student must complete 36-credit hours, of which 24 credits involve in-class instruction ([Appendix C](#)). Six credits involve internships with community-based heritage organizations (ANTH 690), and six more credits are for one-on-one advising with the thesis chair in preparation of the thesis (ANTH 700). Students who do not complete the program in two years continue to enroll in at least one additional credit of ANTH 700 each semester, and this is particularly relevant for students who are maintaining full-time careers (particularly evident in the 2nd and 3rd cohorts). Although the program is designed to be taught to cohorts, we have also admitted non-degree students in 3 class sections for their own career development and training. Since 2017, nine students have completed the program, and 10 (including the newly admitted students) are active, two are on leaves of absence, and two have left the program without completing it. In sum, retention of graduate students remains relatively high (91.3%).

Table 2: Program Completion Projection

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	15-16	16-17	17-18	18-19	19-20	20-21
Projected Program Completion (annual)	0	7	8	8	8	8
Actual Program Completion (annual)	0	5	2	0	2	0

Future revisions to programming need to acknowledge the students who are drawn to the program and the complexities of their education as working adults, in order to better facilitate their completion. This will need to balance the preservation of the commitments to the language and spirit of the legislation that underpins the program’s start, including the culminating written project, currently designed as a thesis.

Employment of graduates

[Table 3](#) summarizes current job placements. In all cases, the receipt of the MA degree facilitated higher upward mobility in the organizations in which they are employed. One employer of two of our graduates is the cultural resources consulting firm, ASM Affiliates, Inc. It has a main office in Pasadena, CA, and 7 branch offices across the American West and in Hawai’i. The Hilo branch office with ten full-time employees and a number of temporary employees is now managed by one of our graduates, and another MA graduate is now a Principal Investigator for the firm.

Table 3: Student Employment Outcomes

Cohort	Hiring Institutions
1st (2015-2017)	<ul style="list-style-type: none"> ● ASM Affiliates (Cultural Resources consulting firm) (2); ● Lands Division, Office of Hawaiian Affairs; ● State Historic Preservation Division ● County of Hawai'i Dept. of Planning ● Edith Kanaka'ole Foundation
2nd (2017-2019)	<ul style="list-style-type: none"> ● Kamehameha Cultural Resources and Planning; ● Cultural Surveys Hawai'i (Private Consulting Firm)
3rd (2019-2021)	<ul style="list-style-type: none"> ● National Park Service, Ala Kahakai National Historic Trail Program ● Director of Honoka'a Heritage Center (endowed funding) ● Office of Hawaiian Affairs.

4. The instructional resources required for the program and how they were utilized compared with anticipated resources

Analysis of number and distribution of faculty

The original BOR proposal called for two additional anthropology faculty and an APT position, but we have created the MA program with a net addition of 0 faculty in the department (in comparison with the year prior to inception [2014]), and with no APT. The program currently operates with five regular full time faculty ([Table 4](#)) with periodic support from Dr. Lynn Morrison (SHARP program director), and one lecturer ([Appendix B](#)). One new faculty expense is that the program director position (Mills) increased from a 9-month appointment to an 11-month appointment (\$17,254/year). Specializations in the department shifted when Dr. Jack Rossen (a paleoethnobotanist) arrived in 2016 under position #83555. His contract was not renewed at the end of 2017, and his position number was reassigned. In the fall of 2018, a new position was subsequently filled by Dr. Tarisi Vunidilo (a

collections specialist, position 86488). Despite this new position (Rossen to Vunidilo), a former department position occupied by Dr. Daniel Brown (a medical anthropologist, position #82556) was reassigned to another department when he retired in 2016, resulting in the zero net growth in anthropology faculty. Also, Dr. Momi Naughton, who operated the UH Heritage Center at the North Hawai'i Education and Research Center (NHERC) in Honoka'a also actively advised graduate students engaged in the program until her retirement in 2020. Without the planned increase in faculty FTE, the program sought to assure that both the undergraduate and graduate programs would remain strong by reducing the size of incoming graduate cohorts and admitting every other year. Applications have remained steady with nearly all students who are accepted subsequently enrolling.

Table 4: Personnel

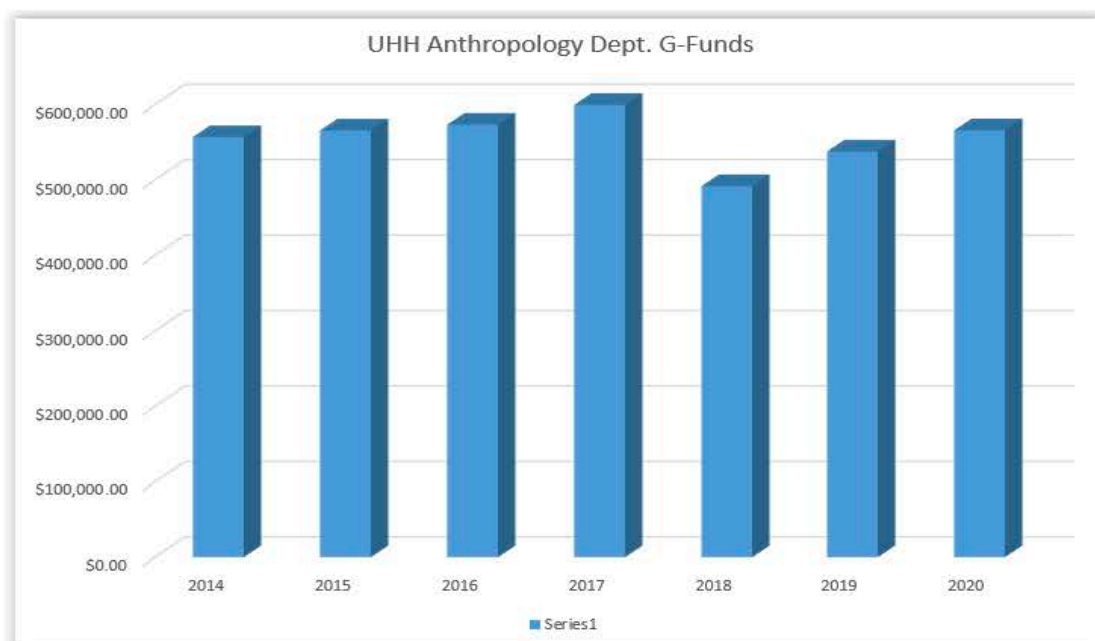
Personnel	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	15-16	16-17	17-18	18-19	19-20	20-21
Projected Tenured Faculty	6	7	7	7	7	7
Actual Tenured Faculty	5	5	4.5	4.5	5	5
Projected Lecturers	1	1	1	1	1	1
Actual Lecturers	1	1	1	2	1	1

Budget and Sources of Funds

The annual operating budgets (B budgets) for CAS departments at UH Hilo, including anthropology, have fluctuated but have trended downwards since 2015 ([Table 6](#)). The current annual operating budget for the entire department is approximately \$3,000 but has been as high as \$8,000. No additional CAS operating budget expenditures have been secured for the graduate program, and, as with the faculty, no distinctions are made between two programs in the department for budget purposes. The primary increase in expenditures is in the salary differential for the HMMA faculty director to serve as 11-month faculty (approximately \$20,000/year). However, even these minimal

increases are offset by the operational funding of the program and student fieldwork opportunities that have largely been obtained through community partnerships.

Table 5: General Funds Allocated to the UHH Anthropology Department



Despite the combined accounting for the graduate and undergraduate programs, a comparison can be made with G-fund expenditures (salaries and fringe) in the department immediately before the program began ([Table 5](#)) the five years that the program has been active. In 2014, total G-fund expenditures for faculty, lecturers, and student employees for the anthropology program were \$556,759. In 2015 with inception of the program and UHPA-negotiated raises, the costs rose by less than \$9,000 to \$565,453 (due in large part to KS funding of faculty salary). With the retirement of professor Daniel Brown in 2017 and the receipt of external grants in the department, the 2018 department budget dropped to \$491,646, and has risen with UHPA salary increases to match the budget from 2015.

Projected operating costs reflect the increase to the base that would have resulted from new hires, rather than the total costs, which are reflected in the actuals. Thus, the program has remained virtually flat in the overall personnel expenses while maintaining both programs. HMMA is only a small portion of those costs when considered by percentage of credit hours provided by department faculty from year to year.

Table 6: Personnel and Operating Costs

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	15-16	16-17	17-18	18-19	19-20	20-21
Projected Operating Costs (from Provisional proposal)	\$96,000	\$183,054	\$192,672	\$216,922	\$222,633	\$228,314
Actual Operating Costs (entire department)	\$565,453	\$573,148	\$599,511	\$491,646	\$537,660	\$565,662

While the general fund expenses have remained flat, external funding continues to minimize G-fund expenses and operating costs. In Kona, Kamehameha Schools (KS) closed the Outrigger Keauhou Beach Resort, demolished the hotel, and established a Native Hawaiian educational center on the property that makes use of cultural sites in the Keauhou region as a long-standing educational program. From 2015 through 2019, they contributed \$230,000 directly to UHH Heritage Management faculty salary through its “Community Investing Program” (Mills, PI). In the original proposal, that had committed to \$180,000. During the first and second summers, Dr. Jack Rossen also conducted two archaeological field school programs in a collaboration with KS on projects in Keauhou-Kahalu‘u, in which HMMA graduate students participated. We continue to build a strong partnership in the operation of the education center (with future funding opportunities for students and the program in general). Included in plans for the education center are bunk spaces, collections management facilities, and classroom space.

Dr. Peter Mills (MA program chair) is a co-PI with Dr. Keiki Kawai‘ae‘a (director of Ka Haka Ula o Ke‘elikōlani College of Hawaiian Language) on a memorandum of understanding (MOU) with the Hawai‘i Dept. of Transportation (HDOT) which includes \$1.25 million in funds for UH Hilo to work on the collection of oral histories and research on archaeological sites in the North Kona region. The funding is currently providing scholarship money to two incoming HMMA graduate students in the Fall of 2021, and additional funding for undergraduate stipends. Collaborative community projects

involving the College of Hawaiian Language, the Heritage Management Program, the not-for-profit Kohala Center, and community outreach are all built into the MOU.

Four independent cooperative agreements between HMMA faculty (Mills and Kawelu) and the National Park Service for a total of \$479,000 are being directed towards undergraduate and graduate student stipends engaged in archaeological projects on NPS lands.

Dr. Joseph Genz (HMMA faculty) is also the UH Hilo project director for the National Science Foundation's "Islands of Opportunity" Louis Stokes Alliances for Minority Participation Program (IOA-LSAMP) program, which provides funding (\$3.9 million over five years) to undergraduate and graduate students who are Native Hawaiian, Pacific Islanders, African Americans, American Indians, and Alaskan Natives in the development of STEM research. This funding will be supporting two heritage management graduate students in the fall 2021 cohort.

Dr. Lynn Morrison (HMMA faculty) is also the director of the NIH funded SHARP program (\$2.4 million) which assists underrepresented students (Native Hawaiians, Pacific Islanders, Hispanic, African Americans, Native Americans and Alaskans, students with disabilities). The program provides year-round paid research assistantships to undergraduates, and although it has not directly funded HMMA graduate students, it has provided buy-outs to Dr. Morrison for teaching releases, which have in turn funded Dr. Tim Scheffler as a lecturer to cover instruction of several graduate courses.

Facilities and Equipment

No new space was acquired to create the MA program. The NHERC Heritage Center in Honoka'a provided additional space for graduate research. The Center occupied a 750 sq. ft. room at NHERC (now Kō Educational Center), with additional storage space. Even as the center transitions to a not-for-profit, collaboration with the proposed program is consistent with the Center's mission to provide educational and research services to the North Hawai'i community, and a graduate of the HMMA program will most likely be operating the not-for-profit in the near future.

Supporting laboratory space includes existing space in Kanaka'ole Hall as well as the Geoarchaeology Laboratory created in 2004 as a result of NSF grants to Peter Mills and Dr. Steve Lundblad (Geology). The lab is maintained with a RCUH revolving account (raising about \$9,000 per year), and provides opportunities for graduate students to learn and employ non-destructive

technologies in the analysis of stone artifacts (with several graduate students obtaining their first peer review publications in the lab). Notably, it was also this laboratory that USGS Hawai'i Volcanoes Observatory turned to for near real-time geochemical analysis of the 2018 Kīlauea eruptions. These rapid results allowed for a 2-day lead-time on predicting the increased speed of the lava flows towards Kapoho (results published in *Science*)².

A significant new addition to the campus infrastructure is a proposed \$32 million collections facility being advanced by Robert Masuda (First Deputy of the Department of Land and Natural Resources) and the Hawai'i State Historic Preservation Division. It proposes to develop a 2.4 acre parcel on the UH Hilo campus into a jointly managed cultural collections facility. Although still in the planning stage, the concept would be to increase interaction between heritage graduate and undergraduate students in the training of Heritage Management through direct research and access to Hawai'i State archaeological collections.

5. How the program is organized to meet its outcomes

Differences in the program from what was approved by the Board of Regents including any changes in curriculum requirements from what was proposed

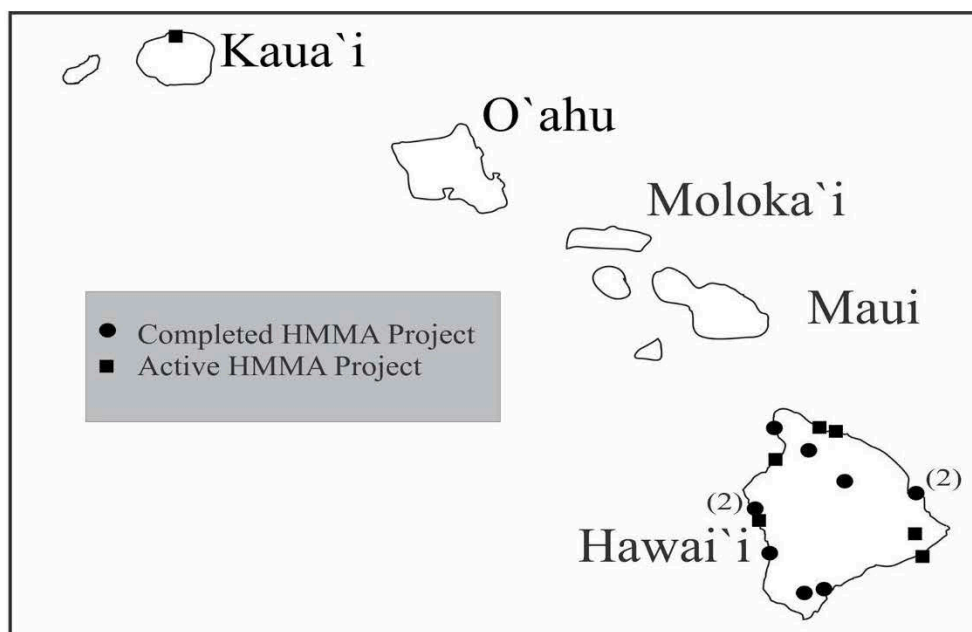
The actual curriculum aligns closely with the original proposed curriculum. No graduation requirements have changed, and no new courses have been added to the curriculum, but there are still two main differences related to the actual number of active graduate students in the program. The first is that fewer courses are being taught simultaneously because we are only admitting new cohorts every other year. The second (related) consequence is that envisioned elective courses within the program are limited. HMMA faculty are attempting to keep students in the first year of the program enrolled in the same core courses with few to no electives within the program. To compensate for this, in some cases, graduate students opt to fulfill one of the program requirements (such as one of the two required “methods” requirements) by enrolling in relevant graduate methods classes offered by Tropical Conservation Biology and Environmental Sciences (TCBES), such as GIS courses or remote sensing courses.

² Gansecki, C., R. Lopaka Lee, T. Shea, S. Lundblad, K. Hon, C. Parcheta 2019. The tangled tale of Kīlauea's 2018 eruption as told by geochemical monitoring. *Science* 366(6470).

Assessment of productivity and cost/benefit considerations within the overall context of campus and University "mission" and planning priorities

In summary, the UHH Anthropology Department, although diverse in its faculty specializations, has one of the strongest campus-wide records of serving underrepresented graduates and undergraduates. Empowering underrepresented Pacific Islanders and minority students through higher education is the common theme of two multi-year grants totaling \$6.3 million now being managed by the department faculty (IOA-LSAMP, \$3.9 million; SHARP, \$2.4 million). Empowering underrepresented descendant communities in the management of their own heritage is also the main mission of the department's HMMA program. An additional \$2 million has already been secured by the university that is directly connected to the HMMA program (Kamehameha Schools community collaborations, National Park Service cooperative agreements, and Hawai'i Dept. of Transportation MOU). Another \$32 million for the proposed DLNR cultural collections facility to be built on campus and integrated with the HMMA graduate students demonstrates a continuing flow of revenue to campus infrastructure and programming related to the overall University mission. This has occurred while the anthropology department has received an operating budget between \$3,000- \$8,000 per year for graduate and undergraduate programs combined, and with the increase of a HMMA project director faculty appointment from 9-month to 11-month salary.

These efforts exemplify the vision of the future of UH Hilo's commitments to indigenous, Native Hawaiian, and Pacific Islander education, as well as community engaged learning in Hawai'i and throughout the Pacific Islands. The image below depicts the breadth of coverage by the completed and active HMMA projects.



Quantitative measures

Table 7: Courses, Sections, SSH

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	15-16	16-17	17-18	18-19	19-20	20-21
Projected No. Courses *	8	5	8	8	8	8
No. Actual Courses Offered *	8	2	7	2	3	2
Projected No. Sections *	8	5	8	8	8	8
No. Actual Sections Offered *	8	8	7	2	5	2
Projected Annual SSH	144	306	324	324	324	324
Annual SSH	120	126	144	117	87	56
FTE/enrollment (Tenure track)	1.5	2.5	1.5	2.0	1.5	2.0
FTE/enrollment (Lecturer)	.5	N/A	.25	.5	.25	.5

* Numbers do not include classes/sections that do not count towards FTE faculty teaching loads, such as heritage management internships (ANTH 690), directed studies (ANTH 699), and thesis writing (ANTH 700).

6. Evidence of student learning and student and program success

Summarize the assessment of whether or not students meet the program outcomes and the evidence used to reach this conclusion

The primary instrument used to evaluate graduate students at the completion of the program is their MA thesis. The Heritage Management program requires every student to complete a community-based thesis project. Successful completion of the thesis requires that the graduate student interact with and respond to community needs and concerns, that they successfully write a cogent original thesis (including at a minimum an introduction, methods, results of fieldwork, and conclusions). They publicly present their thesis to at least one professional setting and in a scheduled thesis defense. Thesis committees prepare a rubric in the evaluation of student success at the completion of the thesis defense.

During the program, there are multiple instruments used to assess core competencies, learning outcomes, and program objectives (including written communication, quantitative reasoning, information literacy, and oral communication), beginning with the students' preparation of a written "two-year plan" in the first semester of their graduate program (ANTH 600) to address written communication and information literacy. This is followed by the evaluation of students' preliminary public presentations (ANTH 602) which are later used in conference presentations, and an assessment of progress in a qualitative and quantitative reasoning class (ANTH 603), and faculty discussions/debriefings with community hosts of graduate interns at the completion of a graduate internship (ANTH 690).

Assessment results demonstrate excellent progress on many core competencies, but the most difficult stumbling block has been written communication skills related to the preparation of a substantial thesis. To compensate for this, the initial ANTH 600 class has been designed as a group advising class to introduce students to many aspects of thesis preparation (style guides, organization, common sources of information), but some students still have faced substantial remedial difficulties in being able to organize and write a thesis. Although a non-thesis option could increase graduation rates and admissions, that strategy would undermine the quality of the program, given that virtually all of our graduates are being prepared for fields where writing substantial reports is essential in their professional careers.

Data on time to degree trends, retention and actions to increase retention and on time graduation

The first cohort finished largely on schedule with six out of seven completing their theses in two years (an ambitious and remarkable start), but the second cohort who suffered multiple disruptions (faculty turn-over, loss of access to project sites due to the Kīlauea eruption, floods on Kauaʻi, family and health issues), are taking longer to complete the program. Three of the original eight students in the second cohort (beginning in the fall of 2017) are completed at the time of this submission. One student left the program from poor academic performance, and two others are currently on academic leave dealing with family issues. The third cohort is closer to the projected schedule, but are still hampered by Covid-19 restrictions in completing community-based research projects. Several members of the second and third cohort are still on schedule to complete their degrees by the fall of 2022.

Indicators of program quality, e.g. accreditation or other external evaluation, student performance on external exams, student employer satisfaction, alignment with Hawaiʻi economic demand, employment/graduate school trends of graduates, awards to faculty and students, etc.

The immediate job-placement of our first cohort in multiple heritage-related government agency and private sector positions is a powerful testament to the success of the MA program ([Table 3](#)). Attached letters of support from many of these agencies and organizations affirm the quality of the training and its appropriateness for reaching desired outcomes in the state.

APPENDICES

APPENDIX A: Catalog Description

The M.A. in Heritage Management is for students who seek careers in a multitude of governmental agencies, private-sector consulting firms, and in education, who work with the interpretation and preservation of cultural heritage. UH Hilo's MA in Heritage Management responds to House Resolution No. 130 of the 24th Legislature (2008).

There are five main objectives:

- a) apply anthropological concepts to guide a workforce of historic preservationists who are committed to the long-term management of Hawaiian cultural resources;
- b) increase the number of individuals of local ancestry in leadership positions in heritage management;
- c) provide better assistance to community planners in developing plans that are more sensitive to traditional cultural properties, human burials, sacred sites, ancient habitation sites, agricultural systems, and trails;
- d) provide training to meet the professional qualifications of principal investigators as defined in Hawai'i Administrative Rules (HAR)13-281 for conducting archaeological fieldwork and for conducting cultural impact assessments; and
- e) provide training to meet the federal professional standards for archaeologists as defined in 36 CFR Part 61

Although the program is focused primarily within Hawai'i, we address heritage training across the Pacific Islands. The proposal fills a clear need to produce individuals who are well-trained in the specific issues of Oceanic heritage. Despite dozens of similar MA programs around the globe, none of the major extant programs focus on the Pacific Islands. The region has unique cultural historical, social, and environmental characteristics that would make localized training more effective in creating qualified, culturally sensitive professionals.

APPENDIX B: List of Faculty and Area of Expertise

Heritage Management Graduate Faculty, Dept. of Anthropology

Faculty	Expertise
Joseph Genz Associate Professor	Cultural impact assessments, oral history, ethnography, Marshall Islands navigation.
Kathleen Kawelu Associate Professor and Dept. Chair	Anthropological relations with communities; archaeological ethics, Hawaiian ethnohistory; community-based participatory research.
Peter Mills Professor and MA Program Chair	Heritage management, Hawaiian archaeology and ethnohistory, stone tool analysis, historical archaeology.
Lynn Morriosn Professor	Biological anthropology, human osteology.
Timothy Scheffler Lecturer	Environmental Anthropology; Analytical Methods; Hawaiian Archaeology.
Tarisi Vunidilo Assistant Professor	Indigenous museum studies, Fiji, indigenous epistemologies.

APPENDIX C: HMMA Program Curriculum

Program Curriculum

Required Courses (12 credits):

ANTH 600 Thesis Design, Method, Theory (3)

ANTH 601 Ethics of Heritage Management (3)

ANTH 602 Historic Preservation Laws (3)

ANTH 603 Qualitative & Quant. Methods (3)

Topical Courses (3): [choose 1]

ANTH 611 Cultural Impact Assessments (3)

ANTH 612 Indigenous Museum Studies (3)

ANTH 613 Human Paleoecology (3)

ANTH 614 Submerged Cultural Resources (3)

Area Courses (3): [choose 1]

ANTH 623 Archaeology of Oceania (3)

ANTH 624 Archaeology of Hawai'i (3)

ANTH 625 Pacific Heritage Management (3)

Applied Analytical Methods (minimum 6): [choose 2]

ANTH 631 Oral History Research (3)

ANTH 632 Paleobotanical Methods (3)

ANTH 633 Material Conservation (3)

ANTH 634 Lithic Analysis (3)

ANTH 635 Human Osteology (3)

ANTH 682 Archaeological Field Methods (3-5)

Year 2 Internship in Heritage Management: (minimum 6 credits to be determined by student's area of specialization, may be repeated)

ANTH 690 Heritage Management Internship (3)

Year 2 Thesis: (minimum 6 credits)

ANTH 700 Thesis Research (1-6)

Total Minimum Semester Hours Required for the M.A. in Heritage Management: 36 credits.

Appendix D: Letters of Support

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UNIVERSITY
of HAWAII®
MĀNOA

College of Social Sciences
Department of Anthropology

January 12, 2022

Dear President Lassner and BOR Chair Moore,

We are writing today as the archaeology caucus of the Department of Anthropology at the University of Hawai'i at Mānoa (UHM) in full support of the University of Hawai'i at Hilo (UHH) Department of Anthropology's proposal to make permanent the UHH MA program in Heritage Management.

The completion of archaeological research is a federal and state requirement to ensure that important cultural and heritage resources are protected, preserved, and understood prior to and through development projects. These cultural and heritage resources are important tangible and intangible elements of our shared island landscapes and need to be treated with the utmost respect and care. As such, the state of Hawai'i needs well-trained archaeologists and other heritage professionals who are able to critically evaluate of local, regional, and international importance of these cultural and heritage resources. Such training does not simply include the technical details of archaeological practice, but must also include an appreciation for Hawaiian values, place-based knowledge, and contemporary community collaboration.

The Department of Anthropology at UHM does offer such training, but cannot alone meet the demand for heritage professionals across the state. Furthermore, the location of UHM on O'ahu is an impediment to some who need to meet familial and professional responsibilities to their communities. The Heritage Management program at UHH has been a wonderful addition and collaborator within this context. Not only have they been able to expand access to graduate programs to underserved communities, they have endeavored to expand training to heritage practitioners beyond those who wish to pursue a specialty in archaeology. In this way, our program and that of UHH are complementary rather than overlapping. The students who have been trained in the UHH heritage management program are well versed in heritage practice and are well respected in the community. While their number may be small relative to some programs, their impact has been felt broadly; this is a testament to both the need for and the quality of the program.

Since the pandemic began nearly two years ago, the leadership of the university system has made clear their desire to promote programs leading to economic growth and community well-being. What has also been made clear is the desire for the university to become a Hawaiian place of learning that attempts to integrate Hawaiian values and perspectives into the educational experience of students across the system. The UHH program in Heritage Management is a tool to meet both of these long-term and strategic goals. As recent discussions surrounding the State Historic Preservation Diversion (SHPD) make clear, Hawai'i is in desperate need of well-trained archaeologists; making permanent the Heritage Management program at UHH is essential for meeting this need.

Seth Quintus (Associate Professor, Convener)

James Bayman (Professor)

Miriam Stark (Professor)

Patrick Kirch (Professor)

Barry Rolett (Professor)

Christian Peterson (Professor)

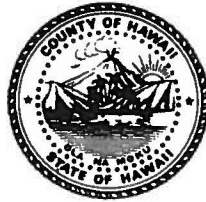
2424 Maile Way, Honolulu, Hawai'i 96822-2223
Telephone: (808) 956-8415
Fax: (808) 956-4893

An Equal Opportunity/Affirmative Action Institution

Mitchell D. Roth
Mayor

Lee E. Lord
Managing Director

West Hawai'i Office
74-5044 Ane Keohokālole Hwy
Kailua-Kona, Hawai'i 96740
Phone (808) 323-4770
Fax (808) 327-3563



County of Hawai'i
PLANNING DEPARTMENT

Zendo Kern
Director

Jeffrey W. Darrow
Deputy Director

East Hawai'i Office
101 Pauahi Street, Suite 3
Hilo, Hawai'i 96720
Phone (808) 961-8288
Fax (808) 961-8742

March 24, 2021

Dr. Peter Mills
University of Hawai'i at Hilo
Dept. of Anthropology
Social Sciences Division Office
200 W. Kāwili Street
Hilo, HI 96720

Dear Dr. Mills:

SUBJECT: Support for Heritage Management MA Program at University of Hawai'i at Hilo

The purpose of this letter is to express our strong support for the MA in Heritage Management Program at the University of Hawai'i at Hilo (UHH).

The Heritage Management Program has provided invaluable research and has produced graduates with the knowledge and skillsets needed to pursue and fulfill our mandates to protect natural and cultural resources on Hawai'i Island. More specifically, our department has benefited directly from the program by employing a graduate as a planner within our Long-Range Planning Division. This employee, Kamuela Plunkett, works directly with our Community Development Plans and has been able to provide knowledge and expertise to assist in the review and development of planning efforts that are more sensitive to traditional cultural properties, human burials, sacred sites, ancient habitation sites, agricultural systems, and trails.

As a county agency with limited resources, it is sometimes difficult to recruit qualified candidates with the unique knowledge and understanding of our local resources that the Heritage Management Program provides. We look forward to furthering our relationship and collaborating with the Heritage Management Program for future research opportunities.

We ask that you continue to prioritize funding and support for the Heritage Management MA Program as a vital public resource.

Dr. Peter Mills
University of Hawai'i at Hilo
Dept. of Anthropology
Social Sciences Division Office
March 24, 2021
Page 2

Should you have any questions, please feel free to contact Bethany Morrison of this office at 961-8138.

Sincerely,


ZENDO KERN
Planning Director

BJM:kvs

P:\wpwin60\Bethany\Grants\Agency Ltr of Support for UHH Heritage Management Program



25 March 2021

Board of Regents
University of Hawai'i
2444 Dole Street
Bachman Hall
Honolulu, HI 96822

Aloha mai U. H. Board of Regents,

I write to you with regard to the Master's program in Heritage Management at the Hilo campus of the University of Hawai'i, which is up for consideration of moving from probationary to permanent status. I strongly believe that the Board of Regents should endorse this change of status, making the Heritage Management program at Hilo a permanent part of the graduate program in Anthropology.

When the Heritage Management program at Hilo was proposed in 2013, this was with the idea that the program would fill a much need niche with respect to cultural and historical sites and resources in Hawai'i. Although some were concerned that the new program would duplicate efforts at U. H. Mānoa, specially the Master's program in Applied Archaeology, in fact the two programs have rather different emphases. Whereas the Applied Archaeology program at Mānoa trains students to be professional archaeologists who can be employed by archaeological consultancies, the program at Hilo is formed around the concept of community-based heritage management, a considerably broader approach that aims to engage a full range of stakeholders. That both programs have attracted students and have flourished simultaneously over the past few years shows that they are complementary rather than being in competition.

The first cohort of seven MA students in the Heritage Management program at Hilo matriculated in 2015 and completed their program in 2017. Of these, two are employed by an archaeological consulting firm, one is working with the Lands Division of OHA, one is a site manager for the Edith Kanaka'ole Foundation, one is a land use planner with Hawai'i County, and another is working for the State Division of Historic Preservation. This is indeed an impressive record of job placement for the Hilo program.

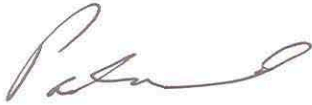
The second and third cohorts now working to complete their programs of study include a number of individuals who were already in or starting careers in such organizations as the National Park Service, Kamehameha Schools, Cultural Surveys Hawai'i, and the North Hawai'i Education and Research Center. The Heritage Management Program is assisting these individuals to advance in these career positions by giving them the requisite professional tools and credentials.

It is noteworthy that the Heritage Management program at Hilo has been implemented without the addition of any new faculty FTE. Although one new faculty member was hired, this was offset by the retirement of another individual whose line was not replaced. Moreover, faculty in this program have brought significant extra-mural funding to the Hilo campus, through grants

and collaborative agreements with the National Science Foundation, the National Park Service, Kamehameha Schools, and other agencies and partners.

In sum, by any measure the Master's program in Heritage Management has during its initial probationary period proven to be a great success. I strongly believe that the continuation of this program is essential to heritage preservation in the State of Hawai'i, and I urge the Board of Regents to approve the continuation of the program on a permanent basis.

Me ka ha'aha'a,

A handwritten signature in cursive script, appearing to read "Patrick V. Kirch".

Patrick V. Kirch
Professor of Anthropology
Member, U. S. National Academy of Sciences

DAVID Y. IGE
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HAWAII DISTRICT
50 MAKAALA STREET
HILO, HI 96720
TELEPHONE: (808) 933-8866 • FAX: (808) 933-8869

JADE T. BUTAY
DIRECTOR

Deputy Directors
LYNN A.S. ARAKI-REGAN
DEREK J. CHOW
ROSS M. HIGASHI
EDWIN H. SNIFFEN

IN REPLY REFER TO:
HWY-H 21-2.0058

April 1, 2021

Board of Regents
University of Hawaii
244 Dole Street
Bachman Hall, Room 209
Honolulu, Hawaii 96822

Dear Regents:

Subject: Support for Heritage Management Masters of Arts Program
at the University of Hawaii at Hilo

I am writing in support of the Heritage Management Master of Arts Program at University of Hawaii at Hilo. As the District Engineer of the Island of Hawaii, I can attest to the benefit of having a program based on our island that has the ability and capacity to perform valuable, time-sensitive research for our community.

In 1999, the Department of Transportation Highways Division (HDOT) began projects to widen the Queen Ka'ahumanu Highway that resulted in adverse effects to native Hawaiian cultural and archaeological resources. The mitigation of the adverse effects culminated in a Memorandum of Agreement (MOA) between the Advisory Council on Historic Preservation, the Federal Highway Administration and the Hawaii State Historic Preservation Officer. One key component of the MOA was requested by the Native Hawaiian Organizations for native Hawaiian cultural outreach and education.

The MOA is currently being executed jointly by the University of Hawaii at Hilo's Ka Haka 'Ula O Ke'elikōlani College of Hawaiian Language and the Department of Anthropology. There are five primary programs for outreach and education that includes scholarships and research opportunities for both undergraduate and masters program candidates. While the undergraduate program will provide a foundation for interpretation and preservation of the Hawaiian cultural heritage, the Masters Program is needed to bring education and the understanding of the Kekaha region to the next level.


As a part of the HDOT project, masters candidates in the Heritage Management Program will prepare theses in native Hawaiian archaeology, anthropology and oral histories. Candidates will work with archaeological collections from the Kekaha region and will interview descendants from the Kekaha region to record valuable histories that will soon be lost.

The key to accessing human resources in the community is to first develop respect and trust. Both Dr. Keiki Kawai'ae'a and Dr. Peter Mills are well respected in the community and have created a unique opportunity for their students to develop their own relationships with the native Hawaiian community. A program like the Heritage Management Program, with leadership and students who have nurtured relationships with the local communities, can only be successful if based on the island of its commitment.

As our transportation needs on the island grow, I envision a continued partnership with the University of Hawaii at Hilo to meet the community need to interpret and preserve as much of the Hawaiian culture possible for the island of Hawaii.

Thank you for the opportunity to provide support for the Heritage Management Master of Arts Program at the University of Hawaii at Hilo. Please feel free to contact me at (808) 933-8866 or by email at harry.h.takiue@hawaii.gov should you have any questions.

Sincerely,



HARRY H. TAKIUE
Hawaii District Engineer



United States Department of the Interior



NATIONAL PARK SERVICE
Interior Region 12 – Pacific Islands
300 Ala Moana Boulevard, Box 50165, Room 6226
Honolulu, Hawai'i 96850

IN REPLY REFER TO:

U.S. Department of the Interior
National Park Service, IR 12 – Pacific Islands
300 Ala Moana Boulevard, Room 6226, Box 50165
Honolulu, HI 96850

March 26, 2021

Dr. Peter Mills
University of Hawai'i at Hilo

Subject: Support for the move of the UH Hilo Heritage Management Program from *probationary* status to *permanent* program

I am writing this letter in support of the University of Hawai'i at Hilo Heritage Management MA program. Since its inception in 2004, the Hawai'i Pacific Islands Cooperative Ecosystems Studies Unit (HIPI CESU) has worked closely with the University of Hawai'i campuses to develop cooperative science-based research projects involving both students and faculty. The Cooperative Ecosystem Studies Units (CESU) Network is a consortium of federal and non-federal partners that work together to protect our nation's natural and cultural heritage. The network makes it easy for experts at universities, museums, research institutes, and other organizations to contribute their knowledge and skills to the preservation of public resources. The CESU engages students at both the undergraduate and graduate level in research and technical assistance. This collaborative effort provides students with real life experiences addressing natural and cultural heritage resource issues and management of our nation's resources.

To date, the National Park Service and UH Hilo's Heritage Management Program have partnered to complete four projects totalling over \$479,000. These projects provide students in the cultural resources field with hands-on experience working alongside Resource Managers. They also provide the agencies with the scientific and technical expertise of University faculty. As the only master's program in Cultural Resources on the Island of Hawai'i, UH Hilo's Heritage Management Program fills an important void for federal agencies such as the National Park Service. As the Research Coordinator and Science Advisor of the HIPI CESU, I strongly support the Heritage Management MA program as a permanent program.

Sincerely,

Jadelyn J. Moniz Nakamura, PhD

Interior Region 12 – Pacific Islands
American Samoa, Guam, Hawai'i, Northern Mariana Islands

Date: March 31, 2021

To: Peter R. Mills, Ph.D.
Professor of Anthropology, UH Hilo

From: Susan A. Lebo, PhD
State Historic Preservation Division (SHPD)
Archaeology Branch Chief

Subject: Letter of Support for UH Hilo Heritage Management Program

Hello,

I strongly support the UH Hilo Heritage Management Program that uniquely offers a critical graduate degree that prepares students seeking careers in preserving, promoting, and interpreting Hawaii's unique and diverse cultural resources and heritage. This cross-disciplinary program emphasizes local classroom and community-based learning and participation. It integrates and promotes core learning in environmental studies, language, ethnic studies, cultural anthropology, archaeology, collections care and management, and public heritage management and interpretation.

Heritage management comprises an essential component of the mission of many federal, state, and county agencies, as well as museums, heritage or cultural centers, and parks, schools, and Hawaii's heritage-based economy. For many agencies and organizations, the demand for qualified heritage management graduates well training in Hawaii-based heritage belies the importance of the UH Hilo Heritage Management Program, including the State Historic Preservation Division, the Department of Hawaiian Home Lands, Kamehameha Schools, the Bishop Museum, to name a few.

For example, the State Historic Preservation Division continually seeks to employ Hawaii-trained cultural heritage staff knowledgeable in architecture, archaeology, cultural history, language, ethnography and oral history, collections management, community consultation and engagement, community-based heritage stewardship and educational outreach. Graduates of the UH Hilo Heritage Management Program include professionals well trained to manage the collections in the Department of Land and Natural Resources (DLNR) facility being built on the UH Hilo campus which will include among its holdings, cultural heritage collections from across the island of Hawaii.

In closing, the UH Hilo Heritage Management Program provides a masters program unique within Hawai'i and one that is fundament to promoting place-based cultural knowledge, expertise, and professional excellence.

Sincerely,

Susan A. Lebo, PhD

April 2, 2021

Peter R. Mills, Ph.D.
Professor of Anthropology
University of Hawai'i at Hilo
200 W. Kāwili St.
Hilo, HI 96720-4091

via email

Re: Letter in Support of the Master of Arts in Heritage Management Program at the University of Hawai'i at Hilo.

Dear Peter:

Thank you for the opportunity to provide a letter of support for the Master of Arts (M.A.) in Heritage Management program at the University of Hawai'i (UH) at Hilo. As a former graduate of the Heritage Management program (in 2017) and the current Director of ASM Affiliates Hawai'i, I have only good things to say—both personally and professionally—about the program and its benefits to the practice of cultural resource management (CRM), the State of Hawai'i, and our islands' communities. Your hard work and dedication to this program, its students, and the field of heritage management are commendable, and I can't thank you enough for the positive impact that you have had on my life and on the heritage of these islands. I see the Heritage Management program at UH Hilo as playing an important role in shaping the future of our Hawaiian Islands, and I hope that this program, which during its short, six-year tenure has already contributed to a brighter future, is allowed to transition from its current probationary status to a permanent fixture of the university's curriculum.

On a personal level, the Heritage Management program has not only contributed to my economic mobility, allowing me to advance from a Senior Archaeologist to a Director of ASM Affiliates (with a permit to conduct archaeology in the State of Hawai'i), but has enabled me to continue working in a profession that I love, and inspired me to advocate for a shift in how the system of heritage management works in this state. By the time I entered the Heritage Management program at UH Hilo in 2015, I had spent 17 years working as an archaeologist, and I had worked my way from being a part-time Archaeological Field Technician living on the Island of Hawai'i to a full-time Senior Archaeologist with three kids, a mortgage, and very little prospect of advancement in the field of CRM without first receiving a graduate degree. In fact, by 2015, most of my similar-aged colleagues with undergraduate degrees had left the field of CRM to seek more gainful employment in other fields. The idea of moving my family elsewhere to pursue a graduate degree or, even worse, spending an extended period of time away from them, did not appeal to me, which is why I was so thankful for the inception of the Heritage Management program at UH Hilo, and why I jumped at the opportunity to apply. My acceptance into the program not only helped to reaffirm my lifelong love of archaeology and enabled me to advance in the field of CRM, but also taught me the importance of pursuing a more equitable, community-based approaches to heritage management that will ultimately benefit the descendant communities to whom that heritage belongs.

It is the community-based approach to heritage management that I find to be most intriguing and unique aspect of the M.A. program at UH Hilo, an approach that is not duplicated at other graduate programs currently offered in the state. The program highlights the importance of involving community in all aspects of how heritage is studied, perpetuated, and portrayed, and the curriculum reflects that commitment to community-based techniques. As a member of the inaugural cohort of the Heritage Management program

at UH Hilo I learned valuable, community-based research skills that I have since brought to the workplace. My participation in the program also enabled me to connect with an amazing group of dedicated individuals who have similar interests in Hawaiian heritage management and since graduation have become leaders in the field, working in the private sector, as well as state and local governmental agencies. Having well-trained, dedicated individuals in these positions, who are from the communities they serve, has already had a positive effect on how heritage management is conducted in the state, and has improved how the regulatory system that is responsible for the management of that heritage operates.

I have also noted the benefits of the Heritage Management program at UH Hilo from the perspective of a professional archaeologist working in the private sector in the State of Hawai'i for more than 20 years. As the Director of ASM Affiliates offices in Honolulu and Hilo, I am responsible for directing and staffing heritage related projects around the State of Hawai'i. It is often difficult to find qualified individuals to manage and staff these projects given the specialized nature of Hawaiian archaeology and the small labor pool of people trained for such work. In recent years, the M.A. program in Heritage Management at UH Hilo has helped alleviate some of those labor shortages. ASM Affiliates currently employs two graduates of the UH Hilo Heritage Management program in senior leadership positions, and another current participant as an associate staff member. We have previously employed other participants in the program as staff members on projects and have brought a few individuals on as interns to help build their professional experience. As an employer I appreciate the skill and dedication of those who participate in the Heritage Management program and wish that more graduates were available to help alleviate our current staffing shortages.

In conclusion, I sincerely hope that this important M.A. program becomes a permanent fixture at UH Hilo and remains a training ground for the next generation of Hawai'i's heritage managers. I truly appreciate the opportunity to have studied with you and the other professors at UH Hilo who have made the program such a success. I look forward to working with more graduates of the program in the coming years, and I cannot express how beneficial having locally trained heritage managers has already been to the communities of our Hawaiian Islands.

Sincerely,



Matthew R. Clark, M.A.
Director ASM Hawai'i

March 30, 2021

Subject: Letter of Support for the University of Hawai'i at Hilo, Heritage Management Program

Aloha to the University of Hawai'i Board of Regents:

Over the last four decades, the State of Hawai'i has passed a series of laws affirming the state's commitment to protecting customarily and traditionally exercised rights of Hawaiians and other manifestations of their heritage. Such laws include Article IX and XII, Section 7 of the Hawai'i State Constitution and Hawai'i Revised Statutes, Chapter 6E. However well-intentioned, the efficacy of these laws in fulfilling the state's obligation is contingent upon the work of individuals who are knowledgeable, professional, culturally competent, and committed to serving our island communities.

As a senior staff member at ASM Affiliates, I can attest to the fact that identifying and hiring such individuals is no easy task. Furthermore, Hawai'i Administrative Rules 13-281, which establishes the minimum standards for professional archaeologists (also architectural historians, ethnographers, historians, and physical anthropologists), requires these individuals to have a graduate degree from an accredited institution in archaeology or anthropology. The University of Hawai'i at Hilo (UHH) Heritage Management program is uniquely positioned to fulfill the educational requirements of this field. Whether an individual chooses to work in the contract or academic component of this field, the Heritage Management program offers its students a diverse range of courses. Another program highlight is its community-based orientation, in which throughout the program, students learn about the complexities of communities and are required to work directly with a community organization. This multi-pronged approach is critical to emerging professionals who are faced with navigating a complex set of laws that directly impacts cultural and historical resources valued by their respective communities.

In 2015, after working as a temporary hire in archaeology and earning my undergraduate degree in anthropology from UHH, I applied for the Heritage Management program. I was one of seven students accepted into the first cohort. Since graduating with my Master's degree, I have been fortunate enough to have secured a senior position at ASM Affiliates, where I prepare archaeological inventory studies, cultural impact assessments studies, burial treatment plans, traditional and customary practices analyses, and preservation plans. Having my graduate degree has allowed me to become a state-certified archaeologist and ethnographer. This in turn has allowed me to do the work that I am passionate about, at the same time, having an active role in the perpetuation of my heritage as a Hawaiian, while providing me with a livable wage to support my family and give back to the UH Foundation biannually. Through my work, I have been able to engage with other Hawaiian communities across the state, work with stakeholders and planners to ensure traditional knowledge and information about Hawai'i's cultural resources are considered during the planning process for development projects in Hawai'i. Each of the six other members from my cohort have also gone on to work at various private and government agencies fulfilling important responsibilities associated with the preservation of Hawai'i cultural heritage.

The efforts of the directing professors at the Heritage Management program have yielded impactful results. While the size of the program remains relatively small when compared to other more established graduate programs at UHH, it serves a long-awaited need in our community. The success of any program should not be measured solely on its financial standing. As I have attempted to demonstrate in this letter, the positive impacts of this program have been far-reaching and deeply personal. Ensuring this program receives the proper support is a critical step in developing heritage management professionals.

As a 2017 graduate of the University of Hawai'i at Hilo (UHH) Heritage Management program, I submit this letter urging the Board of Regents to continue funding and supporting the program.

Mahalo,



Lokelani Brandt, M.A.

Senior Archaeologist, ASM Affiliates | lbrandt@asmaffiliates.com | (808) 989-2471



Edith Kanaka'ole Foundation

To: Whom it may concern

March 24, 2021

From: Kalāho'ohie Mossman
The Edith Kanaka'ole Foundation
1500 Kalaniana'ole St.
Hilo, Hawai'i 96720

Re: Support for the Heritage Management program at the University of Hawai'i at Hilo

Aloha,

I am writing to express my personal support as well as the support of the Edith Kanaka'ole Foundation for the Heritage Management graduate program at the University of Hawai'i at Hilo. I am a graduate of the first cohort of the program, and it has allowed me to better serve my community by engaging in grassroots preservation efforts. I am currently working on four cultural preservation projects in three districts on the island of Hawai'i. Protecting our natural and cultural resources is very important and the Heritage Management program at UHH has provided me with the tools not only to participate in these preservation initiatives but to engage and work with our vibrant communities in moving these initiatives forward.

The Edith Kanaka'ole Foundation is a well respected Hawaiian cultural organization based in Hilo. EKF's mission is to elevate Hawaiian intelligence through cultural education founded on the teachings and traditional practices of Edith and Luka Kanaka'ole. We have been supporting the perpetuation of Hawaiian cultural practices throughout the State since 1990. EKF manages lo'i kalo (taro fields) in Waipi'o, 'Īmakakāloa Heiau in Ka'ū and Haleolono fishpond in Hilo conducting educational programs and community workdays. The Heritage Management program has provided our organization with more opportunities to do research and work in the field of cultural resource management. This program has also increased the percentage of native Hawaiian cultural resource managers in the State of Hawai'i positively impacting cultural resource management at the state and county levels as well as in the private sector and non-government organizations. I sincerely hope that this program can transition from probationary status to permanent status and continue providing such a vital service to our community. Thank you for your consideration.

Kalāho'ohie Mossman
Executive Officer
Edith Kanaka'ole Foundation
1500 Kalaniana'ole St. Hilo, Hi 96720



KULANUI O
HAWAI'I MA HILO

Ka Haka 'Ula O Ke'elikōlani
College of Hawaiian Language

<http://www.olelo.hawaii.edu/khuok/>

MOKUNA
PAPAHANA KĀLAI'IKE
Academic Studies Division

Muapuka
Undergraduate Programs

Mulipuka
Graduate Programs

Kula Maui Ola
Laboratory Schools

Kahuawaiola
Indigenous Teacher Education Program

MOKUNA
HALE KUAMO'O
Hawaiian Language Center

Ho'ōikaika Kumu
Hawaiian Medium Teacher Development

Ho'omohala Ha'awina
Lawelawe Pāpaho & Keleka'a'ike
Curriculum Development,
Media and Telecommunication Services

KE'ENA HO'OKELE KOLEKE
Administrative Office

200 W. KĀWILI STREET
HILO, HAWAI'I 96720-4091
KELEPONA (Phone): (808) 932-7360
KELEPA'I (Fax): (808) 932-7651

KE KULA 'O
NĀWAHĪOKALANI'ŌPU'U
Hawaiian Medium Laboratory School

16-120 'ŌPŪKAHA'IA ST, SUITE 1
KEA'AU, HAWAI'I 96749
KELEPONA (Phone): (808) 982-4260
KELEPA'I (Fax): (808) 966-7821

He Mea Hai Ma Ka Papaha
Kaulike Me Ke Pai Laemāuna

An Equal Opportunity/
Affirmative Action Institution

March 30, 2021

Dr. Peter Mills

Professor of Anthropology

Program Chair, Heritage Management Program

**RE: LETTER OF SUPPORT FOR PERMANENT STATUS OF THE M.A. IN
HERITAGE MANAGEMENT**

E ke kōmike ē, aloha nui 'oukou;

As one of the most diverse campuses in the U.S., UHH, with its remarkable cultural, historical, social, and environmental location, provides prime opportunities for academic research and study in cultural heritage management. One of the unique qualities of Hawai'i island is the rich traditional and cultural properties such as Native Hawaiian ancient habitation sites, agricultural systems, human burials, sacred sites, and ancient trails. Hawai'i Island has many locations where applied learning experiences on the land and communities provide an edge advantage for students in the Heritage Management program.

As the Director of Ka Haka 'Ula O Ke'elikōlani College, I have personally experienced the connection between Hawaiian Studies graduates who pursue a career in the anthropology and archaeology field that the M.A. in Heritage Management Program offers. For example, two-thirds of the first cohort that graduated in 2017 were Hawaiian speakers. They utilized their Hawaiian language and cultural knowledge skills for advanced study in Heritage Management. These students, many of who are Native Hawaiian, used their B.A. knowledge in Hawaiian Studies to contribute to the interpretation and perpetuation of the Hawaiian cultural heritage through a Hawaiian grounded, academic, and professional lens.

In addition, U.H. Hilo currently has an MOU with the State Department of Transportation that Dr. Peter Mills and I currently Co-PI. The over 1.2 million dollar funding will create new anthropologic resources for the field and community. The MOU will also provide funding that offers students an opportunity for scholarship, research support, internship/mentorship, and first hand community projects. Another opportunity for future students will be the SHPD facility that is currently being planned on the UHH campus for remaining Rosendahl collections and other big Island SHPD collections.

It is important that the M.A. in Heritage Management is approved for permanent status. The program is well designed and aligned with the strategic directions of the UH Hilo campus. I ask for your support to approve the program to permanent status.

Me ka ha'aha'a,

A handwritten signature in black ink, appearing to read "Keiki Kawai'ae'a". The signature is written in a cursive, fluid style.

Keiki Kawai'ae'a

Director, Ka Haka 'Ula O Ke'elikōlani

College of Hawaiian Language

April 1, 2021

Dr. Peter R. Mills
Professor of Anthropology
Director Heritage Management MA Program
Anthropology Department
University of Hawai'i At Hilo
200 W. Kāwili Street
Hilo, HI 96720

Dear Dr. Peter Mills:

I attended the Heritage Management MA Program at UH Hilo from 2015-2017, earning my degree in 2017. I currently work as a State Historic Preservation Division (SHPD) Archaeologist IV on Hawai'i Island and attribute my experience, qualifications, and skills to being in the first cohort of the Heritage Management program. The program exposed me to experienced archaeologists, involved community members and archaeological knowledge and skills specific to Hawai'i. I strongly feel that the program opened job opportunities for me as a previously unexperienced archaeologist while also teaching me the skills to be able to perform to the standards expected.

Prior to attending the Heritage Management Program at UH Hilo, I had little experience in archaeology aside from receiving my BA in Anthropology with an emphasis in Archaeology at Saint Mary's College of California (2013) and attending an archaeological field school in O'ahu in 2012. While attending St. Mary's, my passion for Hawaiian culture and archaeology was ignited by a lead professor, Dr. Cynthia Van Gilder. As a sophomore in my undergraduate (2011), Dr. Van Gilder informed me that an MA Program at UH Hilo, created by her graduate classmate, would open in 2015. Dr. Van Gilder was confident I would be a good candidate for the program. I waited two years after graduation, in hopes of being accepted into the program, to do Hawaiian archaeology in Hawai'i. You trusted your classmate's recommendation and had confidence that I would make a positive contribution to heritage management in Hawai'i.

My cohort, professors, classes, and thesis work gave me a solid foundation to not only begin my archaeology career but also to be prepared to hold a lead position in it. My thesis was a fully community-based collaborative project that helped me build relationships and prepared me for consulting with community and advocating as well as addressing their concerns. A large part of the program was learning to combine archaeology with community to ensure the community is involved in decisions regarding archaeological sites and Hawaiian heritage. The program was a positive challenge that helped train me to become outspoken, well-spoken, and confident through presenting in class, at the Society for Hawaiian Archaeology conference, and for my thesis defense which contributes to my current position as I consistently engage with the public. The rigorous writing standards expected of us during the program contributes to my ability to write letters for the State Historic Preservation Division and to ensure that archaeological work and reports are up to the current standards. Prior to working for SHPD, I worked in the private sector and as a Cultural Resource Specialist at Pōhakuloa Training Area. The program prepared me to write archaeology reports, lead projects, and lead field crews.

The most significant part of the program for me was the way it shaped my perspective regarding community and heritage management. The program focuses on the importance of the community having not only input in their heritage but also in shaping and controlling the way that their heritage is studied, preserved, and portrayed. The program contributes to creating groups of individuals that are passionate, caring, and advocates for communities with our main goal being the preservation of that heritage. This is also the perspective that I have brought to my current position as an SHPD archaeologist.

I fully support the Heritage Management MA Program at UH Hilo and hope to see it become a permanent program. I believe it will be a benefit to Hawai'i, Hawaiian heritage, and communities throughout Hawai'i as more individuals pursue the program.

I would like to thank you, Dr. Peter Mills. You have been dedicated to Hawaiian heritage, to Hawaiian archaeology, to the Heritage Management MA program, to your students and to numerous communities throughout Hawai'i Island. I wouldn't be in the position I am in today without your leadership, guidance and belief in me. Thank you for consistently

pushing me to be better during my time in the Master's program and thank you for always being a positive, energetic light.

Sincerely,

A handwritten signature in black ink, appearing to read 'Nicole A. Mello', written in a cursive style.

Nicole A. Mello, M.A.
Hawai'i Island Archaeologist IV
State Historic Preservation Division-Hawai'i Island
Department of Land and Natural Resources
40 Po'okele Street
Hilo, HI 96720

Lyman Museum

... in association with the Smithsonian Institution

276 Haili Street ~ Hilo, Hawai'i 96720
20 March 2021

Professor Peter R. Mills, Ph.D.
Department of Anthropology
University of Hawai'i at Hilo
Hilo, HI 96720

Dear Dr. Mills,

I am writing in strong support of UH-Hilo's M.A. program in Heritage Management, and to acknowledge its excellent reputation among cultural heritage professionals in our community.

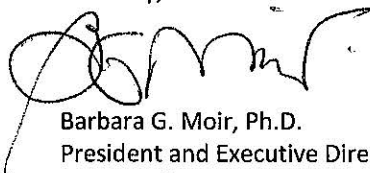
As Executive Director of the Lyman Museum—the only general history museum on Hawai'i Island—I have been concerned about where we would be able to find the next generation of museum professionals to provide stewardship and leadership of such institutions in the years to come. I am of the opinion that the best candidates for such positions would be found within the Hawai'i community, especially if their education, training, and experience were to be gained at Hawai'i-based universities and colleges, and through local internship opportunities. Therefore I was delighted some years ago to hear of the establishment of UH-Hilo's graduate program in Heritage Management, the scope and depth of its curriculum offerings, and the inclusion of a second-year Heritage Management Internship component.

To have this graduate-level educational opportunity available on Hawai'i Island is a tremendous boon, both to local and regional students and to the many Hawai'i-based museums, government agencies, and consulting businesses who need employees grounded in the concepts, issues, and training of cultural heritage and historic preservation—with a Pacific Islands focus. As I have been hearing, the graduates of this M.A. program are now providing these much-needed benefits to the Hawai'i community; they will continue to do so if the program moves from probationary to permanent status at the University.

The program prepares its students for leadership positions and careers in a number of work settings. From my perspective as director of an accredited museum—a significant community resource for preserving and sharing Hawai'i's cultural and historical heritage—I see the development of well-qualified, culturally sensitive museum professionals as of critical importance for the future of our State's museums and historic sites. It just makes sense, from both a practical and an economic standpoint, for UH-Hilo to continue providing this valuable educational opportunity to students from our State and elsewhere in the Pacific region, where its curriculum, regional focus, and program make it unique among Heritage Management graduate programs.

One option in the program's Internship in Heritage Management component is an Internship in Museum Studies. The Lyman Museum looks forward to welcoming such an intern in the near future, and to partnering with UH-Hilo in developing the next generation of HM professionals, for the benefit of our community. Many thanks for all you are doing with this program; we wish you continued success!

Sincerely,



Barbara G. Moir, Ph.D.
President and Executive Director
Curator of Education



**NORTH HAWAI‘i Heritage Foundation
45-3490 Māmane Street Suite C
Honoka‘a, Hawai‘i 96727**

Dr. Peter Mills
Anthropology Department
University of Hawai‘i at Hilo
200 W. Kāwili St.
Hilo, Hawai‘i 96720-4091
March 21, 2021

Dear Dr. Mills:

I am extremely pleased to submit a letter in support of the Heritage Management MA program in the Anthropology Department of the University of Hawai‘i at Hilo. I have been involved with the program since its inception as a thesis committee member and as a resource for research opportunities and internships.

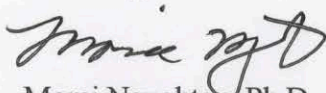
For the past ten years, I was coordinator of the UH Hilo Heritage Center at the Kō Education Center (formerly the North Hawai‘i Education and Research Center) in Honoka‘a. Students who went through the Heritage Management program and are now employed in the field have used our archives for developing cultural surveys relating to their jobs. I have been impressed with the research abilities and knowledge students display after completing the program.

Too often students on Hawai‘i Island who want careers in heritage management have to go to O‘ahu or the mainland to acquire the skills required in county, state or federal positions. The professional opportunities on the island are significant on the federal level with Hawai‘i Volcanoes National Park, Pu‘uhonua o Hōnaunau National Historic Park (City of Refuge) and Pu‘ukoholā National Historic all being located here. On the state level Hawai‘i Island has the Kealakekua Bay State Historical Park, Kohala Historical Sites State Monument, Lapakahi State Historical Park. All of the above mentioned historic and cultural sites require trained staff and have often recruit employees from the mainland.

The Management MA program is crucial to training people locally to fill positions on our island and throughout Hawai‘i. In addition to working for historic parks, students graduate with the knowledge to work for companies doing cultural surveys and environmental impact studies.

This MA program solidly prepares graduates to find employment in Hawai‘i. With its emphasis on ethics, national, state and county laws and statutes, and cultural preservation this master’s program is a gem in the university system that should be retained and cultivated.

Sincerely,



Momi Naughton, Ph.D.
Director, Honoka‘a Heritage Center



KALO

KANU O KA 'ĀINA LEARNING 'ŌHANA

E 'ONIPA'A KAKOU, A KAU I KA NU'U

Let us move together as one to reach the summit

April 1, 2021

Dr. Peter Mills
Professor of Anthropology
Program Chair, Heritage Management Program

RE: Support for the Heritage Management Program at the University of Hawai'i at Hilo

This letter is written in support of the continuation and elevation of the Master's program in Heritage Management at the Hilo campus to permanent status.

Kanu o ka 'Āina Learning 'Ōhana (KALO is a community-based 501(c)3 providing support for 17 Hawaiian-focused charter schools in the state. We are strong advocates of educational opportunities for Native Hawaiian learners that are grounded in cultural practice and preservation. The Heritage Management Program allows the population we serve to pursue advanced degrees within a cultural context aligned with our value and belief systems within a safe, caring environment. A review of the cohort and employment lists are testimony to the proven success of the program, particularly as its graduates work in occupations giving back to local and native communities.

It is commendable that Dr. Mills has been able to accomplish all that he has with minimal staffing and grant support over the years. I applaud his efforts to develop competent community-based heritage professionals that our organization can tap for employment in the future. I look forward to joining other organizations in this endeavor.

Me ka ha'aha'a,

Patricia Bergin, KALO Grants Director
Past Governing Board Member and School Administrator
Kanu o ka 'Āina New Century Public Charter School

64-1043 Hi'iaka Street Waimea, Hawaii
PH: 887-1117



PO Box 6511, Kamuela, Hawaii 96743
FAX: 887-0030

www.kalo.org

HONORING THE PAST, ADDRESSING THE PRESENT, SERVING THE FUTURE

Dr. Billy Bergin

April 1, 2021

Board of Regents
University of Hawaii
2444 Dole Street
Bachman Hall
Honolulu, HI 96822

SUBJECT: Support for the Heritage Management MA Program at University of Hawaii Hilo

This memorandum serves as support for the Heritage Management MA Program moving from probationary status to a permanent program.

There could be no greater opportunity to reaffirm the mission of University of Hawaii Hilo in enlightening the people of Hawaii as to the significance of the cultural heritage than by permanent acknowledgement of the Heritage Management MA program.

There could be no more timely moment than now to focus on the need to further assess and access the vast stronghold of the cultural resources that abounds in the Islands.

There could be no more critical moment than now to explore and report hitherto undescribed cultural and historic features of Mauna Kea for which Peter Mills and his series of three cohorts of graduate students have truly laid the groundwork.

The groundswell is now in the forefront and the Board of Regents is in a position to embrace this commitment.

I urge your positive action and consideration.

Sincerely,



Dr. Billy Bergin

66-1510 PuuHuluhulu Road
Kamuela, Hawaii 96743

PANILOLO PRESERVATION SOCIETY
Post Office Box 640 • Kamuela, Hawai'i 96743

April 1, 2021

Board of Regents
University of Hawaii
2444 Dole Street
Bachman Hall
Honolulu, HI 96822

RE: Support for Heritage Management Master's Program at University of Hawaii at Hilo


This is a memorandum to the Board of Regents on behalf of Paniolo Preservation Society (PPS) in support of the Heritage Management MA at the University of Hawaii Hilo advancing from its probationary status to a permanent program.

Paniolo Preservation Society is an established resource dedicated to the heritage of Hawaii's rich history in ranching as a major component of land uses in the Islands. The underlying responsibility for the use of these lands is based on understanding and sharing the standards set forth by the native people that demonstrated prudent land use principles. As ranching evolved as a significant feature of land use, these forebears embraced Aloha Aina as the enduring principle.

However, the actual researching, recording and reporting of the details of the heritage longed for a formal academic, cultural and ecological institution of learning. The Heritage Management MA program at UH Hilo has effectively achieved this objective. This established program has been productive, not only via boots on the ground, but by delivering to the communities three cohort sets of graduates of the Heritage Management MA program that further the informational outreach in institutions such as ASM Affiliates, Office of Hawaiian Affairs, State Historic Preservation Division, Edith Kanaokaole Foundation, County of Hawaii Planning Department, Kamehameha Schools, National Park Service and North Hawaii Heritage Center.

As founding President of Paniolo Preservation Society, I strongly support Dr. Peter Mills' efforts to move the Heritage Management MA program from probationary to permanent program status.

Sincerely,



William C. Bergin. DVM

Aloha mai kāua e Professor Mills,

March 28, 2021

This letter is to express my wholehearted support for the University of Hawai‘i at Hilo, Heritage Management Master of Arts Program. I am a beneficiary of the first cohort class of 2017 and wish to detail the importance and value of this program.

After attaining my undergraduate degree at U.H.Hilo in 2002, I was employed at Hawai‘i Volcanoes National Park in cultural resource management as an archeologist. However, my upward mobility was limited. Consequently, when the Heritage Management Program was approved in 2015, I applied and was accepted to the program.

The community and personal benefits from this program have provided:

- The opportunity to acquire an advance degree on island while maintaining family, work and homeownership responsibilities.
- Grant funding of \$80K from the Pacific Cooperative Studies Unit/Federal Task Agreement in collaboration with the U.H. Hilo, Anthropology Department and Heritage Management Program supported my research at Pu‘uhonua o Hōnaunau National Historic Park. The Task Agreement supported one full-time graduate student and one part-time undergrad student.
- Producing and publishing a master thesis on oral history’s of decendants from Pu‘uhonua o Hōnaunau and their relationship to the sacred wahi pana. In addition, after graduation, a final report was produced for the National Park Service on the current archive collection of kalai ki‘i (wooden images) and recommendation treatments for future carved images at Pu‘uhonua o Hōnaunau National Historic Park.
- Educational support in the ‘Ōiwi community population that has culminated in professional collaboration and professional networking with the Hawai‘i County Planning Department, State Historic Preservation Division, Edith Kanaoale Foundation, Office of Hawaiian Affairs, private archaeology firms, and Hawaii Island Burial Council (2017 Cohorts).
- The program internship with the Office of Hawaiian Affairs culminated in full-time employment as the legacy land manager of 25,856 acres of Wao Kele o Puna Forest Reserve the week my degree was conferred.

I am grateful to and support the U.H.Hilo, Heritage Management Program. This curriculum is essential to our community’s professional advancement which endeavors to produce and contribute valuable research and support on Hawai‘i island and the Pacific region.

Mahalo piha,

Kalena K. Blakemore

Kalenab@oha.org

Wm. D. Māhealani Pai
PO Box 251
Kailua Kona, HI 96745

April 1, 2021

Dr. Peter Mills, Director Heritage Management MA Program
Anthropology Department
University of Hawai'i at Hilo
200 West Kāwili Street
Hilo, Hawai'i 96720-4091

Re: Heritage Management Program

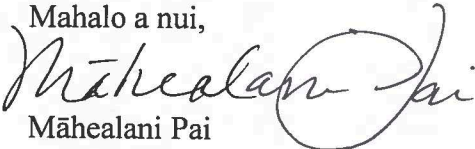
Aloha and Greetings,

I am writing in support of the Masters' Heritage Management program. My name is Māhealani Pai, and I am a graduate student at the University of Hawai'i at Hilo enrolled in the program. I am of Native Hawaiian descent and the eldest of five children. I am the only one amongst my siblings to have persevered on to post-secondary education. In 2012, I received my associate's degree from the Hawai'i Community College at Hilo and received my bachelor's degree in Anthropology in 2017 from the University of Hawai'i at Hilo.

I am a Cultural Resource Specialist for Kamehameha Schools (KS) and applied my graduate course work to advance my employment and the KS educational mission. The program's schedule strikes a balance for me to maintain my employment goals and convenient for me to drive to the other side of the island and return home the same day instead of commuting to another island. Another benefit of the program is that the tuition costs are within my reach of being affordable. I was recently promoted to a Cultural Resource Manager because I could apply what I have learned from my graduate coursework to the KS Kahalu'u Ma Kai redevelopment project in Kona. My acquired skill sets from the program and my skills as a Hawaiian cultural practitioner and aid from lineal descendant community members helped guide and assist the redevelopment efforts in being safe, resourceful, and on schedule.

This project is an undertaking that began in 2018 by removing the former Outrigger Keauhou Beach Resort Hotel to make room for a cultural and educational complex for completion in May 2021, an essential part of my graduate thesis. The Heritage Management program has made a difference in my career and become a kīpaepae, or stepping stone towards revealing my potential that would otherwise be just a dream.

Mahalo a nui,


Māhealani Pai



UNIVERSITY
of HAWAII
WEST O'AHU

'22 APR 27 A9:22

April 12, 2022

MEMORANDUM

TO: Randolph G. Moore
Chair, Board of Regents

Ernest Wilson
Chair, BOR Committee on Academic and Student Affairs

VIA: David Lassner
President *David Lassner*

VIA: Debora J. Halbert
Vice President for Academic Strategy *Debora Halbert*

VIA: Maenette Benham
Chancellor *Maenette Benham*

FROM: Jeffrey Moniz
Vice Chancellor for Academic Affairs *Jeffrey Moniz*

SUBJECT: Request Approval of a New Provisional Certificate in Labor Studies at University of Hawaii – West O'ahu.

SPECIFIC ACTION REQUESTED:

It is respectfully requested that the Board of Regents approve a new provisional program, the Certificate in Labor Studies at the Center for Labor Education and Research, University of Hawaii – West O'ahu.

RECOMMENDED EFFECTIVE DATE:

Upon Board of Regents approval.

ADDITIONAL COST:

No additional costs are associated with this request.

91-1001 Farrington Highway
Kapolei, Hawaii'i 96707
Telephone: (808) 689-2300
Fax: (808) 689-2301

PURPOSE:

The Center for Labor Education and Research (CLEAR) proposes offering a Certificate in Labor Studies. The distance delivered certificate will provide a convenient opportunity for working adult learners seeking a course of study focused on the conditions of work from a labor perspective. This is particularly apropos in the state with, arguably, the highest percentage of unionized employees. While the value of this certificate may be attractive to non-traditional, working adult students in Hawai'i, it also intentionally offers the same educational opportunity to out-of-state students via its proposed distance delivery. The certificate also offers traditional students an opportunity to enhance their major course of study with knowledge and experience, concerning labor, that may prove helpful to draw upon in their future employment. While there may be uncertainty in the kinds of jobs that our graduates may have in the future, knowledge of labor improves their ability to actively shape their experiences in their job and in their community.

BACKGROUND:

Board of Regents (BOR) Policy, RP 5.201, Section IIIA1, Instructional Programs, states that "The board shall approve the establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the president."

Offering a Certificate in Labor Studies duly responds to HRS §304A-1601(4) mandating that the Center for Labor Education and Research, established at the University of Hawai'i – West O'ahu, shall "develop and implement a labor studies degree program or programs in the University of Hawai'i system." The certificate also responds to the call, as voiced by the Labor Education Advisory Council, representing 15 different unions, and the Hawai'i State AFL-CIO, representing 74 local affiliate unions, to develop and implement a program in labor studies. (See the letters of support linked in the footnotes of the attached proposal.)

ACTION RECOMMENDED:

It is respectfully recommended that the Board of Regents approve a new provisional program, the Certificate in Labor Studies, at the Center for Labor Education and Research, University of Hawai'i – West O'ahu.

Attachment: Provisional Program Proposal: Certificate in Labor Studies

c: Executive Administrator and Secretary of the Board Oishi



UNIVERSITY of HAWAI'I*
WEST O'AHU

Provisional Program Proposal

Certificate in Labor Studies

Submitted by the Center for Labor Education and Research

April 12, 2022

1. Executive Summary of the program.

The Center for Labor Education and Research (CLEAR) proposes a Certificate in Labor Studies at the University of Hawai'i – West O'ahu. The implementation of a Certificate in Labor Studies responds to HRS §304A-1601(4) calling for CLEAR to “*Develop and implement a labor studies degree program or programs in the University of Hawaii system*”. For the past four years, Hawai'i has consistently held the #1 position in union density in the United States¹; however, Hawai'i is the only highly unionized state without a formalized labor studies program.

Given that Hawai'i has over 130,000 unionized workers, this program is especially relevant to the Hawai'i labor community. Distance education delivery supports the demand from the labor community on O'ahu and neighbor islands. This certificate would further strengthen collaborations between UHWO and labor organizations and open pathways for unionized workers in Hawai'i to further their education on labor governance, structure, and leadership, labor economics, labor law, and industrial relations, focusing on the necessary skills for Labor Resources Specialists. The program builds upon traditional Labor Studies programs including workers' rights, labor theory, labor ethics and provides students with a critical placed-based component – direct access and exposure to labor-related organizations as well as the labor community in Hawai'i. In addition, students will explore what labor resources specialists do on the state and federal level. As a result, students will be able to holistically address labor issues as they relate to Hawai'i.

This proposed program would collaborate internally by cross-listing LBST 300 – Labor Theory with Humanities or Social Science programs and offers articulation opportunities with Honolulu Community College to provide labor education orientations to the trade's programs

¹ Hawai'i Union Density, 2020 – 2021, Center for Labor Education & Research, University of Hawai'i – West O'ahu with data compiled from the US Bureau of Labor Statistics, [Table 5](#), Union affiliation of employed wage and salary workers by state.

For the past nine years CLEAR has been awarding continuing education credits (CEU’s) to thousands of union stewards and business agents. Since 2018, CLEAR has offered labor education in the form of over 650 workshops, 75 classes awarding over 400 CEU’s to working adults. In collaboration with the labor community, this proposal seeks to extend these education efforts to a credit-bearing course of study that would be accessible via distance learning. The proposed certificate would be similar to the LBST programs offered by higher education institutions in other states (e.g., CA, IL, MA, MI, NY, OH, WA and WI). CLEAR LBST Certificate would provide Hawai’i’s only academic credential designed for specializing in labor relations. The program also positions Hawai’i for national and international labor education related grants and collaborations.

The fifteen-credit certificate delivered via distance education will provide traditional students and members of the labor community an opportunity to pursue an interdisciplinary program of study focused on labor education and labor resources from a labor perspective. This delivery would meet the need as expressed by President Lassner in his *Post-Pandemic Hawai’i and the University of Hawai’i* paper, calling for “more of the programs employers and students need in more flexible formats (online, hybrid, evening/weekend) across the state so that those who have become unemployed or underemployed, or unfulfilled can seize the opportunity to obtain the education and training they need for career advancement and change. As an interdisciplinary program, the design is consistent with UHWO’s strategic action plan as reflected in its value proposition featuring “integrated, transdisciplinary programs”.

In addition to benefitting the labor community, this new program deepens traditional student understandings of their working life including labor law, workers’ rights, Hawai’i labor history, collective bargaining, grievance handling, labor leadership skills, and labor theory. Upon completion, students will have gained experience in labor-related apprenticeships or research projects and be prepared to meet the labor relations specialist workforce requirements at government agencies and labor- organizations.

2. Why is the program a priority for the unit; what needs/goals does it meet?

This certificate focuses on the needs of the 130,000 adult learners represented by labor unions in Hawai’i. This figure includes the approximately 110,000 Hawai’i State AFL-CIO members from 73 local affiliate unions and councils from across the state. This includes 37,000 members of HGEA, the state’s largest union, and the approximately 18,000 members of the ILWU Local 142 who are employed across all of the state’s major industries. As mentioned in the letter of support from Randy Perreira, President of Hawaii State AFL-CIO, “this program would enable students to gain important knowledge in labor resources and collective bargaining in the state with the highest union density in the United States”, (see attached letters of support).

According to the Hawaii Industry Sectors Database, employment classifications relevant to the Labor Studies Certificate are projected to remain stable or increase by 2026.

Table 1. Occupational Outlook - UHWO LBST Certificate

Labor studies related industry occupations	2020	2026	Percent change from 2020 to 2026	Median Salary	Level of Educational Attainment (at least AA degree)

Arbitrators, Mediators, and Conciliators [23-1022]	46	46	0%	\$61,800	88%
Compensation and Benefits Managers [13-1041]	61	60	-1.63%	\$110,614	79%
Compliance Officers [13-041]	1725	1816	+5.27%	\$70,262	75%
Human Resource Specialists	2,153	2,115	-1.76%	\$66,685	71%
Labor Relations Specialists (13-1075)	385	396	+2.85%	\$92,082	71%

Source: University of Hawai'i, Office of the Vice President for Community Colleges, with data compiled from the [Hawai'i Career Explorer](#)

In addition, according to the Federal Occupational Outlook Handbook, Labor Relations Specialists held 73,500 jobs in 2020, with the largest employers being labor unions². Although union membership has been declining, and labor relations specialists job outlook is dependent on organized labor, national awareness of collective bargaining corresponds with an increase in organizing in the private sector³ as well as an increase in collective bargaining bills for public workers at the legislative level.

The Occupational Outlook defines eight duties required of Labor Resources Specialists. Below, the skills are aligned with program objectives and specific courses.⁴

Learning Objectives and courses that cover the duties of Labor Specialists.	Labor Relations Duties
CERT-LBST LO 1. Explain social, political, and economic issues as they relate to the workplace.	1. Advise management on contracts, worker grievances, and disciplinary procedures.
LBST 100, LBST 200 and LBST 400 will all carry Oral Communication (OC) Focus Designations. In addition, guest lecturers from the community will discuss scenarios in which these meetings take place.	2. Lead meetings between management and labor.
CERT-LBST LO 3. Analyze the role of labor in society by discussing interdisciplinary labor concepts in class discussions.	3. Meet with union representatives.

² Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Labor Relations Specialists, at <https://www.bls.gov/ooh/business-and-financial/labor-relations-specialists.htm> (visited February 09, 2022).

³ Young workers give unions new hope—Hawaii Tribune-Herald. (n.d.). Retrieved February 21, 2022, from <https://www.hawaiitribune-herald.com/2022/02/14/nation-world-news/young-workers-give-unions-new-hope/>

⁴ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Labor Relations Specialists, What Labor Relations Specialists Do, at <https://www.bls.gov/ooh/business-and-financial/labor-relations-specialists.htm> (visited February 09, 2022).

LBST 300 includes State and Federal Labor Law and Labor Theory; LBST will include sunshine law requirements for state labor organizations.

4. Draft proposals and rules or regulations.

In **LBST 100**, students review a sample union contract. In addition, **CERT-LBST LO 4**: provides that students will demonstrate the ability to connect labor studies themes and content with local, national and international issues.

5. Ensure that human resources policies are consistent with union agreements.

Students will learn to critically analyze and read text and media through the following course and learning objective:

6. Interpret formal communications between management and labor.

LBST 200 includes a media literacy component; and, **CERT-LBST 5**. Students will critique media for bias and identify reliable sources as it relates to labor information.

LBST 400 will include grievance handling. In addition, the learning objective below addresses issues of bias and cross cultural issues in Hawai'i in the workplace.

7. Investigate validity of labor grievances.

CERT-LBST LO 2. Summarize the cultural components of Labor Studies including the cross-cultural themes in the labor movement in Hawaii, and the impact of cross-cultural labor values on local language and culture.

Every course in the program incorporates structured peer feedback enabling students to critically review each other's work, provide structured feedback. At the end of the program, students will create media presentations of their projects to share with the Labor Education Advisory Council and/or the labor organization who hosted their practicum.

8. Train management on labor relations.

As the most unionized state, Hawai'i working people are especially vulnerable to a lack of formalized labor education, particularly during a public crisis such as a pandemic. During the pandemic lockdown, Hawaii had the highest unemployment rate in the United States with over 140,000 unemployed in May of 2020.⁵ As a result, many Hawai'i state workers answered the call to assist the Department of Labor and Industrial Relations (DLIR) to process thousands of unemployment claims. However, knowledge in labor resources, including labor laws and workers' rights were required in order to properly adjudicate claims. Most held management perspectives which resulted in claims being incorrectly denied or delayed.

⁵ How Bad? Labor Underutilization in Hawaii During the Pandemic · UHERO. (2021, April 27). UHERO. <https://uhero.hawaii.edu/how-bad-labor-underutilization-in-hawaii-during-the-pandemic/>

Further, labor education is important because the pandemic revealed that a unionized civil service is critical to the health and public good of the state. Because the majority of Hawaii’s unionized workforce is in the public sector, the state had the public infrastructure, qualified public workers with the proper training, sick leave, health insurance and job security to provide meals for all public-school children during the lockdown.

It is critical that future generations understand what previous generations built for them, and that they understand the importance of preserving the economic and welfare benefits of collective bargaining.

3. What are the expected enrollments in the program? From what sources?

In 2017, 11 students enrolled in LBST 100. Currently 19 students are enrolled and course evaluations are higher than the UHWO mean.

Enrollment Projections: Provisional Years (2 years for certificate)

	Year 1 2022/23	Year 2 2023/24	Current Year
Projected Enrollment	10	10	0

The projected enrollment considers that students enrolled in LBST 100 and 200 F2022, will enroll in LBST 300 and 400 in S2023, and complete practicum over the summer. A minimum of 20 students will enroll in the certificate program every fall over the next four years.

Program Completion Projection

	Year 1 2022/23	Year 2 2023/24	Current Year
Projected Program Completion (annual)	0	5	0

4. What operating and instructional resources will the program need and where will they come from? What are the program’s facility’s needs?

No additional instructional resources will be required, as the CLEAR is home to the only publicly available labor archive in the state. This program would most effectively utilize existing UHWO CLEAR resources: CLEAR Rice & Roses programs are being digitized in by the 'Ulu'Ulu Archive, the official state archive for moving images, which received a grant to digitize over 3,000 hours of film documenting Hawai'i's labor movement; the CLEAR Labor Archive (winner 2016 of the American Library Association RUSA award) houses materials in labor law, arbitration records, rare manuscripts and Hawai'i labor publications, as well as CLEAR publications on Hawai'i Labor

History. As a result of the use of these materials, the program will provide zero-textbook cost to students taking courses.

CLEAR maintains two separate labor curriculum resources at UHWO:

- 1) CLEAR films at the 'Ulu'Ulu Archive; and,
- 2) the Center for Education and Labor Archive.

CLEAR Faculty/Staff has included four faculty lines (including the director) and one administrative assistant. The new LBST certificate program will be supported by existing employee lines at CLEAR. CLEAR faculty currently teach, primarily, non-credit continuing education classes. Faculty workload will be recalibrated between non-credit and credit teaching assignments to meet the needs of the certificate program without incurring new personnel and operating costs.

Anticipated NEW Personnel and Operating Costs

Personnel	Year 1 2022	Year 2 2023	Current Year
New Tenured Faculty	0	0	0
New Lecturers	0	0	0
Other	0	0	0

Anticipated NEW Operating Costs

	Year 1	Year 2	Current Year
New Operating Costs	0	0	0

5. What impact will developing this program have on resource (re)allocation in the unit?

The new LBST certificate program will be supported by existing resources and employee lines at CLEAR.

6. Has there been consultation at the program level between campuses and within the originating campus? Please provide documentation about who was consulted, in what capacity, and when did it happen? What is the summary of the results of this consultation?

Consultations have taken place internally, within the originating campus, and externally in the labor community.

Since the Labor Studies Certificate was presented to the Council of Chief Academic Officers (CCAO) on 08/18/2021⁶ and approved to move forward by President Lassner⁷, the Labor Studies certificate and revisions to LBST 100, 200, and 300, 400, 486 and 490 have been reviewed and approved at multiple levels. Internally, the LBST Certificate has been approved by UHWO Executives⁸, the UHWO Faculty Senate⁹, and the UHWO Curriculum Committee¹⁰; the program has also been approved by the UHWO Distance Education Committee distance education¹¹. The certificate has already been screened by WSCUC, and was approved for implementation on February 28, 2022.

Regarding internal consultations, the certificate had been previously presented to both the Humanities and Social Science Divisions at UHWO. On November 12, 2017, the certificate for LBST was presented to the Social Sciences Division at a faculty meeting.¹² The Division was not receptive to incorporating the certificate into their existing program, as subordinate to their degree program, mainly due to the interdisciplinary nature of the certificate. The following year, the certificate was presented to the Humanities Division¹³ who shared the same concerns and also decided not to add the certificate as subordinate to their degree program.¹⁴ In 2019, however, UHWO Executives approved CLEAR to pursue BOR approval for a stand-alone certificate, which is more akin to how other labor centers across the country offer their own academic programs.

Externally, the Center and the program itself are advised by the Labor Education Advisory Council (LEAC) created by HRS §304A-1603 which consists of representatives of the trade union movement in Hawai'i - truly representative of community collaboration. LEAC has submitted letters of support in 2016, and in 2021¹⁵ as has the Hawai'i AFL-CIO¹⁶

7. What risks are associated with the program?

For the final course in the program, students may select a student project (LBST 486) or from a list of appropriate placements for a practicum (LBST 490). Students participating in LBST 490 (LBST Practicum) must sign the [UHWO Assumption of Risk and Release Form](#).

8. Program details (curriculum, staffing, assessment, accreditation, etc.)

WSCUC determined that the LBST Certificate does not require a full substantive change review; the UHWO Faculty Senate approved the proposal and courses. Two courses carry Oral

⁶ [CCAO Agenda – August 18, 2021](#)

⁷ [UHWO ATP Certificate in Labor Studies 8.18.21 CCAO](#)

⁸ [2018.ExecSigned LBST ATP](#)

⁹ [UH West Oahu Curriculum Committee Report 2.4.22](#)

¹⁰ [University of Hawaii Mail – LBST curriculum modification](#)

¹¹ [University of Hawaii Mail – Workflow UpdateDE](#)

¹² [SSCI LBST 11.2.2017](#)

¹³ [Email re presentation to HUM](#)

¹⁴ [4.13.2018-UH email-response from HUM Chair](#)

¹⁵ [LEAC Letters of Support 2016, 2021](#)

¹⁶ [Hawaii State AFL-CIO Letter of Support, 2021](#)

Communication (OC) Focus Designations, and one course (Labor Theory) carries an Ethical (ETH) Focus Designation.

Anticipated Courses, Sections, SSH

	Year 1 2022/2023	Year 2 2023/2024	Current Year
No. New Courses Offered	3	3	0
No. New Sections Offered	3	3	0
Annual SSH	180	180	0

The certificate in Labor Studies enables traditional UHWO students as well as unionized members access to quality labor education delivered via distance education. The 15-credit program is comprised of the following credits:

LBST 100: Introduction to Labor Studies

This is a survey course providing the basic concepts, theories, and skills for analyzing labor in society, and the conditions of work from a labor perspective.

LBST 200: Hawaii Labor Media & Film

This course examines the social, political, economic, historical and cultural effects of labor media in Hawai'i are critically examined to understand their impact on labor perspectives locally and globally.

LBST 300: Labor Theory

(ETH – Ethical Focus Designation)

This course provides an introduction to current research in labor, labor law and labor theory.

LBST 400: Seminar in Labor Topics

Seminar of guest speakers on topics such as labor economics, wage theft, medical insurance, income inequality, and labor-related skills trainings including grievance handling, introduction to collective bargaining, parliamentary procedure, introduction to arbitration and mediation and internal/external organizing.

LBST 486: Labor Studies Research Project or LBST 490: Labor Studies Practicum

LBST 100 and 200 carry Oral Communication (OC) focus designations. In addition, by integrating media literacy and identifying media bias as it relates to organized labor, LBST 200 meets the WSCUC information literacy standard. LBST 300: Labor Theory carries an Ethical (ETH) focus designation.

Program effectiveness will be through an alignment of achievement with course, program and institutional standards. The program matrix below provides an overview when standards will be introduced, when students will be expected to demonstrate and apply concepts, and the courses where students will submit portfolio artifacts.

**University of Hawai'i - West O'ahu
Hawai'i Labor Studies Certificate Program Matrix**

CLEAR Program Learning Outcomes	LBST 100 Intro to Labor Studies OC	LBST 200 Hawai'i Labor Media OC	LBST 300 Labor Theory ETH	LBST 400 Seminar in Labor Topics OC	LBST 486 (W) Applied Project; or, LBST 490 (W) Practicum in LBST
LBST CLO 1. Explain social, political, and economic issues as they relate to the workplace.	I	D	D	A	A, P
LBST CLO 2. Summarize the cultural components of Labor Studies including the cross-cultural themes in the labor movement in Hawaii, and the impact of cross-cultural labor values on local language and culture.	I	D, A, P			A
LBST CLO 3. Analyze the role of labor in society by discussing interdisciplinary labor concepts in class discussions.	I	D	A,P		A
LBST CLO 4. Engage in interdisciplinary concepts by applying multiple perspectives to labor concepts.	I		D	A, P	A
LBST CLO 5. Demonstrate the ability to connect labor studies themes and content with local, national, and international issues.	I	D			A
LBST CLO 6. WSCUC Competency: Information Literacy: Critique media for bias and identify reliable resources as it relates to labor information.	I, P			D,	A
University of Hawai'i - West O'ahu Institutional Learning Outcomes	ILO1: Effective Communication: Use relevant information to communicate clearly and effectively to an intended audience through written and spoken language.	ILO2 Cultural Awareness: Demonstrate knowledge of different cultures, sub-cultures or cultural phenomena through the study of art, music, history, literature, ideas, language or cross-cultural research.	ILO3: Critical Thinking: Demonstrate critical thinking skills by applying information to make well-reasoned arguments or solve a problem.	ILO4: Disciplinary Knowledge: Demonstrate knowledge of the purview, processes, and contributions associated with an academic discipline.	ILO5: COMMUNITY ENGAGEMENT: Demonstrate engagement with campus life, the broader community or service to others through the use of co-curricular resources, participation in extra-curricular activities or service learning.

Key = I: Introduce; D: Demonstrate; A: Apply; P: Project Artifact

No additional resources will be required as courses will be taught by CLEAR faculty labor specialists.



UNIVERSITY
of HAWAII®
SYSTEM

'22 APR 28 P4:45

April 18, 2022

MEMORANDUM

TO: Ernest Wilson
Chair, Committee on Academic and Student Affairs

VIA: David Lassner
President

A handwritten signature in black ink that reads 'David Lassner'.

FROM: Debra J. Halbert
Vice President for Academic Strategy

A handwritten signature in black ink that reads 'Debra J. Halbert'.

SUBJECT: Academic Programs Reports for 2021-2022

Attached is a presentation and the following academic programs reports:

- Academic program actions report for AY2021 which includes:
 - New programs and certificates approved
 - Authorizations to plan new programs
 - Status of provisional programs
 - Provisional programs granted established status
 - Stop-outs and terminations of provisional and established programs
- Report on programs with a small number of graduates 2021-2022
- Program reviews report 2021-2022

These reports will be presented to the BOR Academic and Student Affairs Committee at the May 5, 2022, meeting. I will be present to answer any questions the Regents may have. Thank you for your consideration of this report.

Attachments

UNIVERSITY OF HAWAI‘I

Academic Program Actions

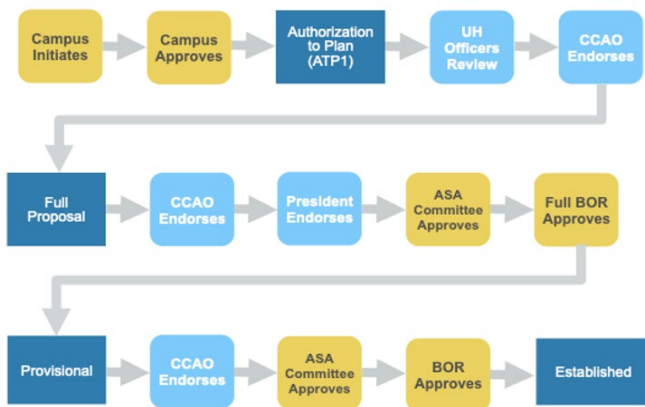
AY2020-2021

UH monitors program innovation and quality to ensure that we meet state workforce needs, the needs of our students, as well continue to develop programs that help the system keep pace with technological, economic, and cultural shifts. The program actions report covers new programs created, provisional programs and their transition to established status, program terminations, and stop-outs *for the prior academic year*. The information is provided so that the Board has a summary of the full scope of program actions completed during the prior academic year, including those taken and approved by each campus.

Managing program actions and facilitating the system-wide conversation regarding new programs requires an ongoing conversation between each campus and the system over how best to meet state needs, maintain rigorous academic programs that provide students with the relevant degrees, and appropriately allocate resources. For new Board members, the program actions process is detailed in the table below. The program proposal process is lengthy in part to be sure that each program is scrutinized on the basis of its contribution and place within the UH System as a whole.

By the time a program is presented to the Board as a provisional program proposal, it has been vetted by the campus, the UH Officers, and the Council of Chief Academic Officers (CCAO). The program is first discussed within the context of the authorization to plan (ATP) process with both the UH Officers and with CCAO. Once the ATP has been approved, the provisional proposal is again reviewed by CCAO prior to being submitted to the Board. Critical to justifying a new program is the state need for the program, the way the program facilitates smooth transfer, the soundness of the proposed programming, and how the new program fits within the larger UH System academic master plan.

Current Program Proposal Process



Academic program actions are typically reported annually for the prior academic year. Due to a disruption in the reporting cycle during the COVID pandemic, the program actions report submitted to the BOR in June 2021 covered AY2019-2020 and also included part of AY2020-2021 in order to bring the reporting current. This year we are bringing reporting back into alignment and so items listed in italics were previously included in the June 2021 report.

I. Authorizations to Plan New Programs

Programs are vetted by the UH System Officers during the Authorization to Plan (ATP) process. The review begins prior to the ATP being transmitted to the Council of Chief Academic Officers (CCAO) who will then also review and comment on the ATP.

A. Authorization to Plan New Academic Programs and Certificates Approved by President:

1. *BEd Special Education, UH Mānoa, updated action memo withdrawing request for additional resources submitted, President approved Oct. 21, 2020.*
2. *UCert One Health, UH Mānoa, President approved April 20, 2021.*
3. *MEd School Counseling, UH Mānoa, President approved April 29, 2021.*
4. Master Architecture, UH Mānoa, President approved July 26, 2021.

II. Provisional Programs and Certificate Actions

After a program has been given the authorization to plan, it submits a provisional program proposal to CCAO for review. Once CCAO has reviewed, these provisional program proposals go to the BOR via the Committee on Academic and Student Affairs for approval. Provisional program status affords programs the time needed to build a constituent base by advertising and recruiting students, as well as to implement any new courses and the proposed curriculum plan.

A. New Provisional Programs Approved by the Board of Regents: None

B. New Provisional Certificates, Minors, Concentrations Approved by the President:

1. *GCert Clinical Research, UH Mānoa, President approved Dec. 14, 2020.*
2. *UCert Queer Studies, UH Mānoa, President approved April 16, 2021.*
3. *UCert Creative Computational Media, UH Mānoa, President approved April 16, 2021.*
4. *UCert Sustainability, UH Mānoa, President approved May 25, 2021.*

C. New Certificates, Minors, Concentrations Approved by Campus Administration:

1. CA Automotive Technology with concentration in Non-Structural Analysis and Damage Repair, Kaua'i CC, Chancellor approved January 15, 2021, effective Fall 2021.
2. CO Cloud Security Specialist, Leeward CC, Chancellor approved January 27, 2021, effective Fall 2021.
3. AS Information & Computer Science with concentration in Cloud Security Specialist, Leeward CC, Chancellor approved March 9, 2021, effective Fall 2021.
4. AA Liberal Arts with concentration in Social Work, Kapi'olani CC, Chancellor approved April 30, 2021, effective Spring 2022.

- 5. AA Liberal Arts, ASC in Sustainability Issues, Hawai‘i CC, Chancellor approved May 6, 2021, effective Fall 2021.
- D. Changes to Provisional Programs Approved by the President or Campus Administration: None
 - E. New Extensions of Provisional Programs Status: None
 - F. Stop-out of Provisional Programs by the President or Campus Administration:
 - 1. CO Plant Biology and Tropical Agriculture, Kaua‘i CC, Chancellor approved March 8, 2021, effective Fall 2021.
 - 2. ASC, Plant Biology and Tropical Agriculture, Kaua‘i CC, Chancellor approved March 8, 2021, effective Fall 2021.
 - 3. Doctor of Juridical Science, UH Mānoa, stop-out Spring 2021, President approved May 24, 2021.
 - G. Removal of Stop-out of Provisional Programs: None
 - H. Termination of Provisional Programs by the President or Campus Administration:
 - 1. *AS Plant Biology and Tropical Agriculture, Kaua‘i CC, termination effective Spring 2021, President approved March 12, 2021.*
 - I. Ongoing Provisional Programs for each Campus:

The program actions report tracks the transition of provisional programs to established status and ensures we move programs through the process efficiently while giving them the necessary time to be successful. Listed below are the current provisional status programs. The disruption of COVID has meant that some programs have had to delay their proposals to become permanent. Formal permission from the President is required to receive an extension beyond the initial provisional term, and a clear justification for such an extension must be provided. Where relevant, extensions for programs are also noted below.

UH Mānoa	Credential and Program	Provisional Until / Comments
Architecture	BEnvD, Bachelor of Environmental Design	3 yr program, provisional 4.5 yrs from Oct 2017 to April 2021, Extended provisional until Fall 2021. Submitting request for established status in Spring 21, revisions requested by BOR, will resubmit for February 3rd ASA meeting (due to shortage of ASA meetings in Fall 21). Will submit request for established status in Spring 2022.

UH Mānoa	Credential and Program	Provisional Until / Comments
Architecture	Master of Landscape Architecture	Provisional until 2020. May 2021- Inaugural graduating cohort. Fall 2022- LAAB site visit for Spring 2023 accreditation. Spring 2023- Complete request for established status to BOR.
Arts & Humanities, Engineering, Natural Sciences	Ucert, Creative Computational Media	Effective Spring 2021, provisional until 2025.
Education	Gcert, Sustainability & Resilience Education	Effective Spring 2020, provisional until 2024.
Education	Ucert, Sustainability	Effective Spring 2021, provisional until 2025.
Engineering	BS, Construction Engineering	Provisional until 2025.
Engineering	BS, Engineering Science	Starting Fall 2019, provisional until Fall 2025.
Human Nutrition, Food and Animal Sciences	PhD, Nutrition	Three year extension approved January 17, 2019. Provisional until 2022. Request for established status submitted Spring 2022.
JABSOM	Gcert, Clinical Research	Effective Fall 2021, provisional until 2025.
Law	SJD, Doctor of Juridical Science	Provisional until 2021. Stopped-out effective Spring 2021.
Natural Sciences	BA, Astronomy	Provisional until 2019. Extension approved 1/8/2020 until Fall 2021. Second extension through AY2022 approved 6/25/21. Request for established status submitted Spring 2022.
Natural Sciences	BS, Astrophysics	Provisional until 2019. Extension approved 1/8/2020 until Fall 2021. Second extension through AY 2021-2022 approved 6/25/21.

UH Mānoa	Credential and Program	Provisional Until / Comments
		Request for established status submitted Spring 2022.
Natural Sciences	BA, Biochemistry	Provisional until 2016. Extension granted until 4.30.21. Extension through 2021-22. Request for established status submitted Spring 2022.
Natural Sciences	BS, Biochemistry	Provisional until 2016. Extension granted until 4.30.21. Extension through 2021-22. Request for established status submitted Spring 2022.
Natural Sciences	BS, Molecular Cell Biology	Provisional until April 2020. Extension approved 5/10/18 Second Extension approved 5/20/19 Third Extension approved 7/20 Fourth extension to 4/30/22 approved 5/25/21. Request for established status submitted to CCAO in January 2022.
Pacific & Asian Studies	BA, Pacific Islands Studies	Provisional until 9/20. Extension approved 5/10/18 Extension approved 9/11/19 for one year until 9/20. One year extension through 8/21 approved 9/9/20. Request for established status submitted in Spring 2022.
Pacific & Asian Studies	Master of Asian International Affairs	Provisional until 2022.
Social Sciences	UCert, Queer Studies	Effective Spring 2021, provisional until 2025.
Social Work	UCert, Aging (Gerontology)	Removal of stop-out approved 4/11/18; effective Fall 2018. Provisional until 2020. Extension approved to Fall 2022.

UH Mānoa	Credential and Program	Provisional Until / Comments
Tropical Agriculture & Human Resources	BS, Dietetics	Provisional until 2023.
Shidler College of Business	MS in Information Systems MS in Finance MS in Marketing Management	Provisional until 2022.

UH Hilo	Credential and Program	Provisional Until / Comments
College of Arts & Sciences	BA, Gender & Women's Studies	Stopped out Fall 2021.
College of Arts & Sciences	MA, Heritage Management	Provisional until Fall 2017. Extension approved 10/9/17 to Fall 2018. Extension approved 1/14/2020 to Fall 2020. Extension approved 8/31/21 through June 2022, no further extensions shall be granted. Request for established status submitted in Spring 2022.
College of Pharmacy	PhD, Pharmaceutical Sciences	Provisional until Fall 2017. Extension approved --- to Fall 2019. Extension approved 8/31/21 through June 2022, no further extensions shall be granted.

UH West O'ahu	Credential and Program	Provisional Until / Comments
Humanities	BA, Creative Media	Provisional until 2024.
Mathematics, Natural & Health Sciences	BS, Natural Science	Provisional until 2024.
Business Administration	BS, Cybersecurity	Provisional until 2026.

Hawai'i CC	Credential and Program	Provisional Until / Comments
Creative Media	AS, Creative Media	Provisional until Fall 2018. One-year extension granted March 20, 2020. Extension to June 30, 2023 approved 2/18/21.

Honolulu CC	Credential and Program	Provisional Until / Comments
None		

Kapi'olani CC	Credential and Program	Provisional Until / Comments
Food Services	APC, Culinary Management	Provisional until Spring 2016. Extension approved 8/1/18 until Spring 2019. Extension to June 30, 2023 approved 2/18/21.
Hospitality, Business and Legal Education	APC, Hospitality Operations Management	Provisional until Spring 2018. Extension approved 1/6/17 until Spring 2019. Extension to June 30, 2023 approved 2/18/21.

Kaua'i CC	Credential and Program	Provisional Until / Comments
Creative Media	AS, Creative Media	Provisional until Fall 2018. One-year extension granted March 20, 2020. Extension to June 30, 2023 approved 2/18/21.

Leeward CC	Credential and Program	Provisional Until / Comments
Education	APC, Special Education PK-12	Provisional until Fall 2019. COVID Extension until the next BOR Meeting. Approved CCAO March 2020. Extension to June 30, 2023 approved 2/18/21. Provisional to Established status submitted in Spring 2022.

Leeward CC	Credential and Program	Provisional Until / Comments
Integrated Industrial Technology	AS, Integrated Industrial Technology	Provisional until Fall 2021. Extension to June 30, 2023 approved 2/18/21.
Sustainable Agriculture (formerly Plant Biology and Tropical Agriculture)	AS, Sustainable Agriculture (formerly Plant Biology and Tropical Agriculture)	Provisional until Spring 2018. One-year extension approved 7/11/18 to Fall 2019. 2-yr extension approved 3/19/19 to Spring 2021. Extension to June 30, 2023 approved 2/18/21. Name changed to Sustainable Agriculture, President approved 4/13/21.

UH Maui College	Credential and Program	Provisional Until / Comments
Creative Media	AS, Creative Media	Provisional until Fall 2018. One-year extension granted March 20, 2020. Extension to June 30, 2023 approved 2/18/21.

Windward CC	Credential and Program	Provisional Until / Comments
None		

III. Established Programs and Certificate Actions

Programs are granted provisional status for sufficient time to build the program and allow for at least one cohort of students to graduate. It should be noted that many programs slated to transition to permanent status were delayed by the pandemic and associated academic disruptions.

A program may be stopped out so that faculty can reconfigure the curriculum with the intent of bringing a newly designed curriculum back online or in anticipation of future termination of the program. If the student demand is low, programs may be stopped out and terminated to reallocate resources needed elsewhere. While we have listed the stop-outs here, the list does not tell the full story as there can be many reasons for a program to be stopped out. However, as both the stop-out and termination lists indicate, campuses are thinking about their curriculum, attempting to consolidate where necessary, and also engaged in revision of programs to better meet future needs.

A. Provisional Programs Granted Established Status by the Board of Regents: None

B. Changes to Established Programs Approved by the Board of Regents: None

C. Changes to Established Programs Approved by the President:

1. Name Changes Approved by President:

- a. *BA Women's Studies, change department and degree title to BA Women, Gender and Sexuality Studies, UH Mānoa, President approved Dec. 18, 2020.*
- b. *UCert, Adv. GCert, BA Honors Track, Course Subject Women's Studies changed to Women, Gender and Sexuality Studies, UH Mānoa, President approved Feb. 25, 2021.*
- c. *MS Clinical and Translational Research name changed to Quantitative Health and Clinical Research, UH Mānoa, President approved May 23, 2021.*
- d. *AS Natural Science concentrations in Biological Sciences and Physical Sciences, name changed from Biological Science and Physical Science to correct grammar and reflect full range of disciplines, UHCCs, President approved July 7, 2021.*
- e. *Architectural, Engineering and CAD Technologies program name and CIP code changed to Architecture, Engineering and Construction Technologies CIP 15.1001, Honolulu CC, President approved July 22, 2021.*

2. Stop-out of Admissions Approved by President:

- a. *PhD Nursing, UH Mānoa, stop-out Fall 2020 through Spring 2024 pending program modification or termination, President approved Sept. 10, 2020.*
- b. *GCert Gerontology, UH Mānoa, extension of stop-out through Fall 2022 pending update and evaluation of program, President approved Dec. 23, 2020.*
- c. *MA Religion, UH Mānoa, stop-out Fall 2021 through Spring 2022 pending program modification, President approved Feb. 21, 2021.*
- d. *GCert, Technologies for Teachers, UH Mānoa, stop-out Spring 2021 until Fall 2023, to be reevaluated, President approved May 24, 2021.*
- e. *PhD Biomedical Sciences, Clinical Research Track, UH Mānoa, stop-out Fall 2019 through Spring 2022, until students complete the program, President approved June 17, 2021.*

3. Removal of Stop-Outs Approved by President: None

4. Terminations Approved by President:

- a. *GCert in Executive Accounting, UH Mānoa, termination effective Spring 2021, President approved Feb. 21, 2021.*
- b. *Master of Geosciences for Professionals, UH Mānoa, termination effective Feb. 2021, President approved Feb. 21, 2021.*
- c. *MS Biological Engineering, UH Mānoa, termination effective Fall 2021, President approved Mar. 6, 2021.*

D. Changes to Established Programs by Campus Administration:

1. Name Changes and Modifications Approved by Campus Administration:
 - a. *ASC Writing, AS Information and Computer Science, AS Natural Science, CA Information Security, CO Aquaponics Technician, Leeward CC, various curriculum modifications, effective Fall 2021, Chancellor approved March 9, 2021.*
 - b. *ASC Business, ASC Global Studies, ASC Performing Arts, AS Business Technology, AS Digital Media Production, AS Sustainable Agriculture, CA Business Technology, CA Digital Media Production, CA/CO Sustainable Agriculture, Leeward CC, various curriculum modifications, effective Fall 2021, Chancellor approved April 15, 2021.*

2. Stop-out of Admissions by Campus Administration:
 - a. *CO Database Administration, stop-out Fall 2021, to be terminated Fall 2023, Kap‘iolani CC, Chancellor approved Jan. 8, 2021*
 - b. *CO Sustainability Science, Kaua‘i CC, stop-out Spring 2021, termination effective Fall 2021, Chancellor approved Jan. 21, 2021.*
 - c. *CO Geographic Information Systems, Kaua‘i CC, stop-out Fall 2021, termination effective Fall 2022, Chancellor approved Feb. 10, 2021.*
 - d. *CO Advanced Geographic Information Systems, Kaua‘i CC, stop-out Fall 2021, to be terminated Fall 2022, Chancellor approved Feb. 10, 2021.*
 - e. *ASC Fitness Professional, Kaua‘i CC, stop-out Spring 2021, to be terminated Fall 2022, Chancellor approved Feb. 22, 2021.*
 - f. *AA Liberal Arts with concentration in Deaf Studies and Deaf Education, Kapi‘olani CC, stop-out Fall 2019 through Spring 2020 pending program modifications, Chancellor approved Mar. 19, 2021.*
 - g. *AAS/CA Architecture, Engineering and Construction Technologies, Hawai‘i CC, stop-out Spring 2022 pending program modifications, Chancellor approved April 27, 2021.*
 - h. *AS/CA Communication Arts, Honolulu CC, stop-out Fall 2021, Chancellor approved December 2, 2020.*
 - i. *CO Entrepreneurship, Hawai‘i CC, stop-out Fall 2020 (terminate in Spring 2023), Chancellor approved December 29, 2020.*
 - j. *CO Culinary Arts, Hawai‘i CC, stop-out Fall 2020 (terminate in Spring 2023), Chancellor approved December 29, 2020.*
 - k. *CO Business Foundations, Hawai‘i CC, stop-out Fall 2020 (terminate in Spring 2023), Chancellor approved December 29, 2020.*
 - l. *CO Retail Foundations, Hawai‘i CC, stop-out Fall 2020 (terminate in Spring 2023), Chancellor approved December 29, 2020.*
 - m. *CO Business Essentials, Hawai‘i CC, stop-out Fall 2020 (terminate in Spring 2023), Chancellor approved December 29, 2020.*
 - n. *AAS/CA Architecture, Engineering, and Construction Technologies, Hawai‘i CC, stop-out Spring 2022, Chancellor approved April 23, 2021.*
 - o. *AS/CA Aeronautics Maintenance Technology, Honolulu CC, stop-out Fall 2021, Chancellor approved June 22, 2021.*
 - p. *AAS/CA Electrical Installation and Maintenance Technology, Honolulu CC, stop-out Fall 2021, Chancellor approved June 22, 2021.*

- q. CA Auto Body Repair and Painting, Honolulu CC, stop-out Fall 2021, Chancellor approved June 22, 2021.
 - r. BS Aeronautical Science, Commercial Aerial Info Technology concentration and Commercial Professional Pilot concentration, UH Hilo, stop-out 2021 until Summer 2023, Chancellor approved July 2, 2021.
3. Removal of Stop-outs by Campus Administration: None
4. Terminations by Campus Administration:
- a. *CO Nurse Aide Training, Kap‘iolani CC, termination effective Fall 2020, Chancellor approved Dec. 14, 2020*
 - b. *CA Retail Management, Kap‘iolani CC, termination effective Fall 2020, Chancellor approved Dec. 14, 2020*
 - c. *CO Customer Service, Kap‘iolani CC, termination effective Fall 2020, Chancellor approved Dec. 14, 2020*
 - d. *CO Retailing, Kap‘iolani CC, termination effective Fall 2020, Chancellor approved Dec. 14, 2020*
 - e. *CA Sustainability Science, Kaua‘i CC, termination effective Spring 2021, Chancellor approved Jan. 13, 2021*
 - f. *CA Plant Biology and Tropical Agriculture, Kaua‘i CC, termination effective Spring 2021, Chancellor approved Jan. 13, 2021.*
 - g. CO in Agricultural Technology, Windward CC, Chancellor approved September 3, 2019, effective Fall 2019 (Banner code processed August 4, 2021).
 - h. CO in Plant Landscaping, Windward CC, Chancellor approved September 3, 2019, effective Fall 2019 (Banner code processed August 4, 2021).
 - i. CO in Subtropical Urban Tree Care, Windward CC, Chancellor approved September 3, 2019, effective Fall 2019 (Banner code processed August 4, 2021).
 - j. CA Sustainability Science, Kaua‘i CC, Chancellor approved January 13, 2021, effective Spring 2021.
 - k. CO Beekeeping, Kaua‘i CC, Chancellor approved January 15, 2021, effective Spring 2022.
 - l. CO Sustainability Science, Kaua‘i CC, Chancellor approved January 21, 2021, effective Fall 2021.
 - m. CO Adult Residential Care Home Operator, Kaua‘i CC, Chancellor approved January 22, 2021, effective Spring 2021.
 - n. CO Community Health Worker, Kaua‘i CC, Chancellor approved January 22, 2021, effective Spring 2021.
 - o. CO School Health Aide, Kaua‘i CC, Chancellor approved January 22, 2021, effective Spring 2021.
 - p. AA Liberal Arts, ASC in Fitness Professional, Kaua‘i CC, Chancellor approved March 8, 2021, effective Fall 2022.
 - q. AS Information & Computer Science with concentration in Mobile Developer Specialist, Leeward CC, VP for Community Colleges approved March 19, 2021, effective Fall 2021.

- r. AS Information & Computer Science with concentration in Database Support Specialist, Leeward CC, VP for Community Colleges approved March 19, 2021, effective Fall 2021.
- s. AS Digital Media with concentration in Internet Publishing, Leeward CC, Chancellor approved April 15, 2021, effective Fall 2021.
- t. AA Liberal Arts with concentration in Exploratory Health Science, Kapi‘olani CC, Chancellor approved April 19, 2021, effective Fall 2021.
- u. CO Accounting Office Assistant, Kaua‘i CC, Chancellor approved May 5, 2021, effective Fall 2022.

IV. Future Program Actions

As we move into the next few years, it is important to note that each campus continues to make critical assessments regarding existing programs. While COVID has delayed some proposals, most are on track to transition from provisional to established. It is also worth noting that new program proposals have slowed in recent years, but those going forward now are far better integrated as part of the UH System as a whole than were past proposals. Prior to COVID, UH System had begun to develop a rolling 6-year academic master plan that would advise the board on where we planned to go more than on the programs that had already been approved. However, developing a 6-year academic master plan has been deferred until the the new strategic plan and vision are developed.



Report on Programs with a Small Number of Graduates and Program Review Update

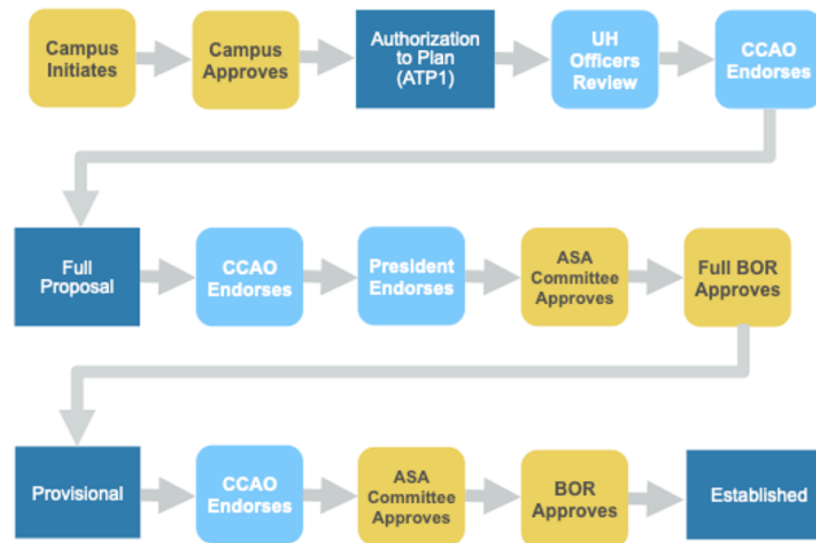
May 5, 2022

BOR Committee on Academic
and Student Affairs



Program Action Process

Current Program Proposal Process





Summary of AY 2020-2021 Academic Program Actions Report

New Provisional Programs Approved by the BOR	0
Authorizations to Plan New Academic Programs	4
Provisional Programs Granted Established Status	0
Ongoing Provisional Programs	35
Program Terminations and Stop Outs	51



Programs with a Small Number of Graduates

- Background
 - The report looks at three year averages of enrollment for undergraduate majors and five year averages of enrollment for graduate degrees.
 - A small number of graduates is fewer than 10 undergraduates over the three year period and fewer than 3 graduates over a five year period for graduate programs.
- Overview of this report:
 - Programs that came off the list.
 - Programs that were added to the list.
 - Programs that recommend action other than continuation.
 - A table that includes the recommendation and actions taken for each small program.
- Benefit of this report is that each campus scrutinizes small programs each year in light of current context (e.g., a pandemic).



Program Review

- EP 5.202 requires reporting of a list of external program reviews each year to the BOR.
- As noted in RP 5.201, “Instructional programs are systematically assessed to assure currency, improve teaching and learning, and enhance achievement of student learning outcomes.”
- Each campus has established a review cycle aligned with policy for all programs.
- Program reviews are generally iterative; after the external review there is an opportunity for the program to respond and create a plan to address any areas highlighted in the review.



Impact of these Reports

- Data on small programs and information from program reviews is used in current unit level planning for program redesign and collaboration.
- These reports provide data useful in making plans for future academic programming as we enter the process of crafting a strategy for our future as a statewide system.

UNIVERSITY OF HAWAI‘I
Programs with a Small Number of Graduates
and Program Reviews Report
2021-2022

Each year the University of Hawai‘i System (UH) provides the Board of Regents (BOR) with two reports required by BOR policy related to academic programs. First is the review of programs with a small number of graduates. Second is the overview of program reviews conducted at each campus during the prior academic year. These reports provide a retrospective look at program evaluation and over the prior academic year.

While a key measure that has been useful for evaluating programs, it should be noted that size of program in terms of its graduates is not the only relevant characteristic that should be taken into consideration. While the programs with a small number of graduates is an important data point, the critical nature of the program in terms of state need and the role the program plays in providing courses to non-majors are also important factors that must be considered. As can be seen with the analysis provided by each campus regarding the justifications for continuing the programs on the list (see Appendix A attached), there are substantive reasons to continue these programs and to support the needs they serve. Programs with a small number of graduates may also serve students well beyond those who graduate with a degree in that field, especially those courses that contribute to the general education curriculum.

I. Review of Programs with a Small Number of Graduates

Each year campuses must review programs with a small number of graduates as directed by [EP 5.229](#) and determine how best to ensure these programs support the larger UH mission and program outcomes. Per EP 5.229, the report lists the undergraduate programs with fewer than 10 graduates (3-year average) and graduate programs with 3 or fewer graduates (5-year average), for review by the respective campuses. The focus on programs with a small number of graduates is designed to encourage campuses to take steps to increase the numbers of students in these programs, and it helps provide each campus and the UH System with additional information regarding management of academic programs across the 10 campuses. The assessment of small programs can help campuses take steps to revitalize or restructure programs.

Each campus is asked to review and provide a recommendation for programmatic next steps from one of the following options:

- 1) Continuation of program
- 2) Require the program to grow to meet criteria by next review
- 3) Merge with another program
- 4) Stop-out or terminate

The full data for the small number of graduate data for 2021 report is posted on the Institutional Research and Planning Office (IRAPO) website found here: (<https://data.hawaii.edu/#/reports/smallprograms>). Access to the report requires signing in with a UH ID and contains the full data set. Here, we provide the highlights from the report related to changes to programs in the following categories:

- 1) Programs new to the report this academic year
- 2) Programs that were removed from the report this academic year

Table 1 shows programs with a small number of graduates that made positive gains during the last academic year, increasing graduates above the required threshold. Those programs indicated with a * were new to the small programs list during the last reporting cycle and so were able to remove themselves from the small program list during a single academic year.

Campus	Program
UH Mānoa	BA Ethnic Studies* BA Hawaiian* BA Philippine Language and Literature MS Ocean & Resources Engineering* Ph.D. Learning Design and Technology Ph.D. Communication and Information Science
UH Hilo	BA Art*
Hawai'i CC	CA Auto Body Repair & Painting CA Architectural Eng. & CAD Tech.*
Kaua'i CC	CA Architectural Eng. & CAD Tech.
Maui College	AS Dental Hygiene AAS/AS Administration of Justice

Table 1: Programs removed from small program list in 2021.

While some programs came off the list, new programs were added in 2021. Table 2 lists programs new to the list in 2021. Programs new to the list are currently undergoing campus level review in accordance with executive policy to develop a strategy to improve enrollment.

Campus	Program
UH Mānoa	BA/BS Geology & Geophysics MA/MFA Dance Ph.D. Philosophy Ph.D. Urban and Regional Planning
UH Hilo	BA History BA Liberal Studies
Hawai'i CC	CA Diesel Mechanics CA Carpentry Technology AA Hawaiian Studies
Honolulu CC	CA Architectural Eng. & CAD Tech CA Occupational Envir. Safety Mgt. AAS/AS Automotive Mechanics Tech

Campus	Program
Kaua'i CC	AAS/AS Accounting
Leeward CC	CA Business Technology CA Integrated Industrial Tech
Windward CC	CA Agripharmatech

Table 2: Programs added to the programs with a small number of graduates report for 2021

II. Program Review Report AY 2021-2022

Executive Policy on Program Review: [EP 5.202](#) requires that each program undergoes review at least every 7 years for 4-year campuses and every 5 years for 2-year campuses. Procedures for the review process have been established at each campus and each campus has a website where completed reviews are archived. The policy requires that “a list of program reviews completed is submitted to the BOR annually.”

A. Program Review Resources

Table 3 includes information on where to find the program reviews and campus/program responses. A list of program reviews by campus is included as well.

Campus	Review Process
Mānoa	Five-year review process with self-study, external review, and final reporting. Colleges are reviewed on a rotating review schedule including all departments. https://manoa.hawaii.edu/ovcaa/program_review/
West O'ahu	Seven-year review process with self-study, external review, and final reporting. Programs are reviewed on a rotating review schedule. https://westoahu.hawaii.edu/programreview/
Hilo	Five-year review process with self-study, external review, and final reporting. Departments are reviewed on a rotating schedule. https://hilo.hawaii.edu/blog/accreditation/about/program-reviews/
UHCCs	Comprehensive review every five years in alignment with UHCC EP 5.202. Includes an annual reporting requirement via the Annual Review of Program Data (ARDP) process. https://uhcc.hawaii.edu/varpd/ https://uhcc.hawaii.edu/ovpcc/policies/UHCCP_5.202

Table 3: Campus Location of Program Reviews

B. List of Programs Reviewed in AY 2021-2022

The following are programs that underwent program review during the 2021-2022 academic year. Those programs that were on the Programs with a Small Number of Graduates Report are bolded. It is anticipated that campuses addressed the small program issue during the review process and the recommendation to continue the program is based upon this review.

University of Hawai'i at Mānoa	Degree/Certificate
American Studies	BA/MA/PhD

University of Hawai‘i at Mānoa	Degree/Certificate
Art & Art History	BA/BFA/MA/MFA
Asian International Affairs	MAIA
Asian Studies	BA/MA
Astronomy	BA
Astrophysics	BS
Athletic Training	MS
Biochemistry	BA/BS
Biological Engineering	BS
Biology	BA/BS
Botany	BA/BS/MS/PhD
Chemistry	BA/BS/MS/PhD
Chinese	BA
Civil Engineering	BS
Classics	BA
Communication Sciences and Disorders	MS
Computer Engineering	BS
Computer Science	BS/MS/PhD
Creative Media	BA
Dance	BA/BFA/MA/MFA
East Asian Languages and Lit (Chinese)	MA/PhD
East Asian Languages and Lit (Japanese)	MA/PhD
East Asian Languages and Lit (Korean)	MA/PhD
Electrical Engineering	BS
English	BA/MA/PhD
French	BA/MA
German	BA
History	BA/MA/PhD
Information and Computer Sciences	BA
Japanese	BA
Korean	BA
Linguistics	MA/PhD
Marine Biology	BS
Mathematics	BA/BS/MA/PhD
Mechanical Engineering	BS
Microbiology	BA/BS/MS/PhD
Molecular Cell Biology	BS
Music	BA/BMus/MA/MMus/PhD
Ocean & Resources Engineering	MS

University of Hawai‘i at Mānoa	Degree/Certificate
Pacific Islands Studies	BA/MA
Philippine Language and Literature	BA
Philosophy	BA/MA/PhD
Physics	BA/BS/MS/PhD
Religion	BA
Religion (Asian)	MA
Russian	BA
Second Language Studies	BA/MA/PhD
Spanish	BA/MA
Theater	BA/MA/MFA/PhD
Zoology	BA/MS/PhD

UH West O‘ahu – No programs scheduled for review this academic year.

University of Hawai‘i Hilo	Degree/Certificate
Admin. Justice	BA
Agriculture	BS
Anthropology	BA
Heritage Management	MA
Hawaiian and Indigenous Language Revitalization	PhD
Indigenous Language and Culture Education	MA
Political Science	BA
Pharmaceutical Sciences	PhD

UH Maui College	Degree/Certificate
Agricultural and Natural Resources	AAS
Applied Business and Information Technology	BAS
Electronic and Computer Engineering Technology	AS
Early Childhood Education	AS
Engineering Technology	BAS
Nursing	AS

Hawai‘i Community College	Degree/Certificate
Automotive Mechanics Technology	CA/AAS
Creative Media	AS
Electrical Installation and Maintenance	CA/AAS
Electronics Technology	CA/AAS
Fire and Emergency Response	CA/AS
Diesel Mechanics	CA/AAS

Hawai'i Community College	Degree/Certificate
Hawaiian Studies	AA
Information Technology	CA/AS
Liberal Arts	AA
Marketing	CA/AAS
Nursing	AS
Tropical Forest Ecosystem & Agroforestry	CA/AS

Honolulu Community College	Degree/Certificate
Cosmetology	CA/AAS
Electrical Installation and Maintenance Technology	CA/AAS
Fashion Technology	CA/AAS
Fire and Environmental Emergency Response	CA/AAS
Sheet Metal and Plastics Technology	CA/AAS

Kapi'olani Community College – No programs to be reviewed this academic year.

Leeward Community College	Degree/Certificate
Accounting	AS, CA
Automotive Technology	AAS, CA
Business Technology	AS, CA
Culinary Arts	AS, CA
Integrated Industrial Technology (new program)	AS, CA
Liberal Arts	AA
Management	AS, CA
Television Production	AS, CA

Kaua'i Community College	Degree/Certificate
Hospitality and Tourism	CA/AAS

Windward Community College – No programs were reviewed this academic year.

III. Conclusion:

As we enter the strategic planning process for the UH System over the next few months, developing a vision of a system-wide Academic Master Plan will be integral to setting the agenda for the programs that will be initiated over the next few years. This programmatic approach will provide the Board with a sense of direction for our future curricular needs as well as provide a framework for ensuring the University remains responsive to the future in which we will be living. It is likely that this plan will need to encourage more and better interdisciplinary programming and facilitate collaboration and coordination across traditional departments; it is likely there will need to be more emphasis on shorter term credentials. The next few years will be an exciting time for program innovation within the UH System.

**Hawai'i Community College
Small Programs**

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
ACC/ACCT Accounting (AAS)	Recommend continuation of program. If the state follows through with building a coalition to clarify the credential landscape in the state, clear pathways and information sharing on the possibilities for students will be easier and will assist families and counselors in education and career planning. Expand opportunities to include industry as part of the education experience including work-based learning, internships, job shadowing, and career days. Industry highlighted the importance of work experience as well as an interest in increased involvement with students. Streamlining pathways for industry engagement will help increase partnerships and support additional opportunities for students. This work will also help increase student awareness of career opportunities within different fields of interest.	The program is working with UHMC, KauCC, and LeeCC to share resources and reduce low-enrolled classes. Classes are being offered with online options to attract students from across the island and from around the state to boost enrollment. Consolidating and collaborating on programs to streamline course offerings. Classes, normally taught at 20-25 capacity, are increased to 30 capacity to allow for consolidation of course sections and for increased enrollment.	The Accounting (ACC) program fills a need for qualified entry-level accounting staff and bookkeepers in our community. The program also provides essential skills to non-majors. Report from DLIR at www.hiwi.org for Hawaii County's Best Job Opportunities (2017) Accountants and Auditors are listed. According to the Promising Credentials Report, Finance and Accounting Professionals are in demand. There are not enough qualified candidates to fill positions. Available positions include executives, sales, and accountants. Industry members believe that a lack of interest in certain industries is due to potential employees not understanding what types of positions may be available, many of which pay very well. Promising Credentials: Certified Payroll Professional https://hawaiicareerpathways.org/resources/work-based-learning/career-exploration/promising-credentials/
AGR Agriculture (CA, AAS)	Recommend continuation of program.	Program participated in Cross-campus discussions and continues to articulate curriculum with other CC campuses. This program received a National Science Foundation (NSF) Grant for Applied Trades Education (ATE). The grant aims to build a Mobile vertical self-contained growing system to demonstrate affordable options for farmers in remote or infertile areas. The co-partnership grant with our Electronics Program will integrate the project into curriculum and develop courses that focus on food sustainability and security. A partnership with Ka'u High School entitled "Ka'u Dream" has been deployed and it offers a dual-credit pathway for Ka'u High school students to enter our Agriculture Program.	The Agriculture Program student intake is on a biennium schedule, therefore graduation rates are on that schedule also. Students have two CO, CA & AAS as exit options. Even with full classes, students can leave at these various points and not reflect the enrollment of students in the Program. With current trends, growth in this career pathway is projected. All graduates in this area are critical for our economic recovery. The County of Hawaii has identified Agriculture as a priority industry and we continue to meet with various departments to fill local workforce demands. Agriculture workers are considered essential workers.
AEC Architectural Eng & CAD Tech (AAS)	Continue the program until courses are developed, approved and transitioned to modified Construction Technologies.	The AEC program is articulating curriculum with the HonCC campus. Through continual cross-campus discussions, courses will be	Students have two CO, two CA & AAS as exit options. These were designed for various career pathways & careers'

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		<p>aligned. HonCC plans to deliver courses across the State, however, no discussions on implementing in-person components have been finalized.</p> <p>In partnership with Carpentry and Apprenticeship, an employer survey was conducted and local employers identified courses that would assist in supporting their workforce needs. As a result, this program is revamping their offerings and is developing an alternative "Construction Technology" curriculum that will deliver multiple certificates.</p>	<p>technological changes. Students can leave at these various points and not reflect the enrollment of students in the Program. This program offers early college classes for several high schools.</p>
<p>ABRP Auto Body Repair & Painting (AAS)</p>	<p>Recommend continuation of program. Continue to develop pathways from High School to program.</p>	<p>The ABRP Program is in process to start an Early College initiative with two local High Schools. The program was already in the logistics for the proposal to start. Unfortunately, the pandemic hit and everything was put on hold. The program is hopeful that in the near future, They can resume that goal.</p> <p>Faculty conducted a Statewide employer survey on the importance of the ABRP program for the future of the industry and next generation. "Everyone can get in an accident with their vehicle one day... Someone trained will always be needed to perform the repairs safely and properly." Being that vehicles will always need repairing after being involved in an accident. New vehicle electronics and special technical skills are needed to teach and prepare future students to go out in the industry. With support from Auto Body Association and ongoing skill training for faculty, Students are prepared to learn the most up to date technical skills.</p>	<p>The ABRP Program grants both CA & AAS graduation exit options. Due to that, students can choose one of the two options. This does not reflect the amount of students that successfully graduated. The ABRP Program has gone through a total curricular change. Curriculum was designed to meet new industry demands. Information for these changes was guided by the programs advisory committee. Graduates in this career pathway are critical for our economic recovery and in this pandemic, are essential workers.</p> <p>This is the only ABRP AAS degree program in the State of Hawaii and survey results indicated significant support from their industry, including the State Auto Body Association.</p> <p>The ABRP program has been continuing its participation with EDvance (non-credit) Summer Explorations classes for high school students.</p> <p>ABRP accepts students every Fall; cohort model.</p>
<p>BTEC Business Technology (CA, AAS)</p> <p>Click here to see BTEC Program Data</p>	<p>Recommend continuation of program. The BTEC program is versatile and provides courses for BTEC and non-BTEC majors who hope to increase their technological skills, employability, and/or job performance. If the state follows through with building a coalition to clarify the credential landscape in the State, clear pathways and information sharing on the possibilities for students will</p>	<p>The development of short-term certificates to create valued credentials is in progress. The BTEC program has modified its offerings to be on a one-time-a-year schedule to ensure that classes are sufficiently filled. In addition, the HawCC program collaborates with UHMC and LeeCC to streamline course offerings so that we are able to fill courses</p>	<p>The BTEC program fills a need for qualified office clerks in our community. State of Hawaii Short-Term forecast says that office and administrative support industry will produce over 10,000 job openings. According to State of Hawaii Employment Projects for Industries and Occupations for 2018-2028, Office and Administrative Support will have the</p>

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
	<p>be easier and will assist families and counselors in education and career planning. Expand opportunities to include industry as part of the education experience including work-based learning, internships, job shadowing and career days. Industry highlighted the importance of work experience, as well as, an interest in increased involvement with students. Streamlining pathways for industry engagement will help increase partnerships and support additional opportunities for students. This work will also help increase student awareness of career opportunities within different fields of interest. Continue to develop Prior Learning Assessment that acknowledges and awards credit to underemployed.</p>	<p>across the system and reduce low-enrolled classes, not just at the campus level.</p> <p>Classes are being offered with online options to attract students from across the island and from around the state to boost enrollment. The program worked with EDvance to offer non-credit courses that can be converted to credit.</p> <p>An updated articulation agreement with local high schools is being finalized and approved with a more streamlined process for students to apply for these credits.</p> <p>Consolidating and collaborating on programs to streamline course offerings.</p> <p>Marketing through social media posts are being implemented to help with program brand awareness.</p>	<p>second highest projected job openings by industry.</p> <p>According to Promising Credentials Report, Administrative Support Professionals are in demand. There are not enough qualified candidates to fill positions. Available positions include executives, sales, and accountants. Industry members believe that a lack of interest in certain industries is due to potential employees not understanding what types of positions may be available, many of which pay very well.</p> <p>https://hawaiicareerpathways.org/resources/work-based-learning/career-exploration/promising-credentials/</p> <p>The BTEC program needs stable, collegial support for the program.</p>
CARP Carpentry (CA, AAS)	<p>Recommend continuation of program. Continue alignment with DOE. Submit curriculum modifications.</p>	<p>The Carpentry Program is in process to align curriculum with 5 local high schools. This will be a dual-credit pathway and students will earn both high school and college credit toward 1-year in Carpentry CA/AAS. The Construction Academy faculty are currently working with DOE on aligning course learning outcomes and any curriculum changes needed for college courses will be submitted for review and approval. Faculty will add a CA that includes 1-year of Carpentry courses, allowing high school students to earn a college credential. Early College courses, that supplement dual-credit offerings, may be requested by high schools. This will assist in meeting AAS general education requirements once students transfer to college.</p>	<p>The Carpentry Program offers two graduation options. CA & AAS. Many opt for the CA. This program is also the home of our flagship "Model Home Project" which involves the efforts of five programs & the Department of Hawaiian Home Lands. Each year, this program builds a home for a Native Hawaiian family which they will enjoy for many generations. This program has been doing this project for over fifty years. Program accepts students in Fall; cohort model.</p>
CM Creative Media (AS)	<p>Recommend continuation of program. Our CM lab is the best equipped computer graphics media lab on Hawai'i island. Our service to the community is to continue offering students the opportunity to interact with the most current technology through our production classes. HawCC's CM program is the only higher education program on island that prepares students for employment in the field of digital media design and production.</p>	<p>Pre-covid CM majors increased from 22 to 38 to 51 majors in 2019. With COVID-19, our majors have decreased to 35 majors for Fall 2020 and 26 majors 2021. Beginning Spring 2021, our program has committed to offer the CM AS degree that can be taken fully online to attract students from across the island and from around the state to boost enrollment. The program has also been</p>	<p>This program prepares students for employment in the field of digital media design and production. It gives necessary education and training to students seeking entry-level positions as digital media artists and/or transfer to a Baccalaureate granting institution. It provides professionals already in the field with updated technology training.</p>

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
DISL Diesel Mechanics (CA, AAS)	Recommend continuation of program.	<p>working with other CM programs in the UH system to streamline online course offerings.</p> <p>The Diesel Mechanics Program has one faculty and no lecturers. The Program accepts students every other year; degrees are awarded every other year.</p> <p>The program was ready to start a new cohort due to its increase in student demand. Unfortunately, the pandemic is continuing and all positions were swept or frozen. In addition, the DISL lab had to cap student enrollment to maintain social distance and ensure safety and sanitation.</p> <p>The program is hopeful that in the near future, they can resume that goal.</p>	The Diesel Mechanics Program does student intake on a biennium schedule, therefore graduation rates are on that schedule also. DISL offers two graduation options. CA & AAS. Many opt out for the CA. Program student intake is on a biennium schedule. Graduation rates will differ per year. Graduates in this career pathway are critical for our economic recovery and in this pandemic, are essential workers.
ECED Early Childhood Education (CA, AS)	<p>Recommend continuation of the program. Implement the 9-credit Certificate of Competence (CO) that has been vetted through the HawCC CRC workflow approval process. This CO will be used to support the Early College initiative, as well as, public Pre-K Educational Assistants workforce requirements and any Child Development Associate (CDA) Credential applicants. Explore options to support students in persistence and retention including monetary incentives such as stipends, tuition scholarships, and textbook purchases. Increasing the credit hours for ECED 190 lab and ECED 291 practicum from 4 credits to 6 credits. This will more accurately reflect the academic requirements of these courses. In addition, 6 credits will allow students to receive financial aid that will provide support for them to persist in and complete the ECE program with a degree. Implement all aspects of the Early College grant requirements for continued student success.</p>	<p>This degree is fully articulated into the Bachelor of Arts in Social Science (with concentration in Early Childhood Education) offered through the University of Hawai'i West Oahu via Distance Education. There is also an articulation agreement with UH Mānoa. We have recently updated the MOA articulation agreement with Chaminate University of Honolulu.</p> <p>During 2019-20: Overall Program Healthy Demand - Healthy Efficiency - Healthy Effectiveness – Cautionary</p> <p>In Spring 2020, we transitioned our courses to fully online in response to COVID, with a small attrition rate.</p> <p>In Fall 2020, we chose to continue ECE courses with online delivery. Two courses were reconstructed from face-to-face into rigorous online platforms with a need to revise key assignments. We also increased the course capacity in response to enrollment demand. The majority of the ECE courses were at full capacity.</p> <p>To facilitate the ECE majors in completion of graduation requirements, an MOA was established with Kamehameha Schools to allow students access to KS early learning sites for observation and practicum purposes.</p>	This program provides attitudes, skills and knowledge for people who work with young children and their families in a variety of early childhood programs. The Certificate of Competence (CO) or Certificate of Achievement (CA) prepares students for support roles in early childhood programs. An Associate in Science (AS) degree prepares students to be teachers or lead practitioners in early childhood programs.

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		To build career and academic pathways through the Early College program, we met and secured support from two high school principals and wrote a Perkins Grant for Early College. Due to COVID, the Perkins Grant shifted priorities for the grants, and we had to resubmit twice. Unfortunately, the ECE Early College grant was denied. We continued pursuit of the Early College initiative and were able to partner with DOE, Kamehameha Schools and a private, non-profit organization to secure funding. This private funding includes student support through payment of tuition, materials, and monetary incentives.	
ET Electronic Technology (CA, AAS)	Due to the loss of the only faculty position, the program has initiated a stop-out. A local study will be conducted and modifications will be made to meet local workforce needs. This lack will adversely affect the NSF grant's goal and completion.	Articulating curriculum with other campuses and within campus to streamline possible course offerings. This program has acquired a co-partnership National Science Foundation (NSF) grant with our Agriculture Program to build a mobile, vertical self-contained growing system. This system will promote food sustainability and security for our State. The NSF grant objectives have been severely impacted after resignation of only faculty. However, we are continuing to look for options on how best to deliver.	The Electronic Program has gone through a total curricular change in the past two years. Curriculum was designed to meet new industry demands. Information for these changes was guided by the programs advisory committee. Students graduating will have careers in the installation and maintenance of our industrial process control and communication infrastructure. With current trends, growth in this area is projected. All graduates in this area are critical for our economic recovery and in this pandemic, are essential workers. Program student intake is on a biennium schedule. Graduation rates will differ per year.
HOST Hospitality (CA, AAS)	Recommend continuation of program with restructure and updating to meet current industry needs. Expand opportunities to include industry as part of the education experience including work-based learning, internships, job shadowing and career days. Industry highlighted the importance of work experience as well as an interest in increased involvement with students. Streamlining pathways for industry engagement will help increase partnerships and support additional opportunities for students. This work will also help increase student awareness of career opportunities within different fields of interest.	Working with UHMC, Kaua'iCC, and KapCC to align the program more closely across the system and share resources to limit low-enrolled classes. A program revision has been approved and will be implemented beginning in Fall 2022 to meet the needs of system alignment as well as industry needs. Feedback from advisory council as well as the Hawai'i County Research and Development study are being used to help guide the changes to the program. Consolidating and collaborating on programs to streamline course offerings.	There is currently no HOST full-time faculty to lead the HOST program. The strong visitor industry on the island supports the need for a HOST program. According to DLIR report on www.hiwi.org , State of Hawaii's Best Job Opportunities through 2028 forecast, (released Sept 2020) there were many, many hospitality industry jobs listed. https://hawaiicareerpathways.org/resources/work-based-learning/career-exploration/promising-credentials/ After a full-time faculty/Program Coordinator is hired, the priority actions for this program include building strong connections with local industry and asking industry experts to help and conduct and judge assessments of

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
HWST Hawaiian Studies (AA)	Recommend continuation of the program.	Please see CPR linked below. AA HWST Comprehensive Review	<p>student projects which will then provide students with "authentic assessment" and learning experiences.</p> <p>THE HLS program that houses:</p> <ul style="list-style-type: none"> - The AA HWST degree and ASC. We partner with early college - from AY18-19 to AY20-21, our program offered 49 early college courses and continues to work with community based organizations and high schools. Our goal is to not only offer our courses but also enable students to earn the HLS-HWST ASC - From Spring 2020 to Spring 2021 we were part of the HODOE 'Ōlelo initiative 7 sections of HAW classes to K-12 faculty generating an additional estimated \$99,000. - Our program continues to collaborate with multiple campus programs and departments (scheduling /HWST courses for the ATE program; partner with Edvance to provide seats for non-credit to enroll in our HWST 103 courses; ongoing discussion with Math and Natural Science for a HWST-STEM ASC; etc. - Paepae 'Ōhua services provides tutoring in HAW/HWST, peer mentoring, study spaces, media lab, hosts various academic and cultural workshops
IT Information Technology (CA, AS)	Recommend continuation of program. If the State follows through with building a coalition to clarify the credential landscape in the state, clear pathways and information sharing on the possibilities for students will be easier and will assist families and counselors in education and career planning. Expand opportunities to include industry as part of the education experience including work-based learning, internships, job shadowing and career days. Industry highlighted the importance of work experience as well as an interest in increased involvement with students. Streamlining pathways for industry engagement will help increase partnerships and support additional opportunities for students. This work will also help increase	<p>Finalized MOA with UHMC to articulate with their ABIT program.</p> <p>The program is working with other campuses to share resources and reduce low-enrolled classes. Classes are being offered with online options to attract students from across the island and from around the state to boost enrollment.</p> <p>Next idea to be worked on is to consider a collaboration with the HawCC ETRO program to share resources and reduce costs.</p> <p>Consolidating and collaborating on programs to streamline course offerings.</p>	<p>This program is a career-laddered program that provides training in the use and support of business-related computer systems, data communication networks, and the development of business computer information systems programs and focuses on using computers and information technology as tools to solve business problems.</p> <p>Promising Credentials:</p> <ul style="list-style-type: none"> CompTIA Network+ CompTIA A+ DoD Information Assurance (IA) Certification <p>https://hawaiicareerpathways.org/resources/work-based-learning/career-exploration/promising-credentials/</p>

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
MWIM Mach, Welding & Ind Mech Tech (CA, AAS)	<p>student awareness of career opportunities within different fields of interest.</p> <p>Recommend continuation of program. Hire another faculty position for the program to expand opportunities in Machining to meet Astronomy Apprenticeship pathway. Hire APT lab support to assist with safety, equipment maintenance and procurement. Continue to conduct outreach at local schools and host student visits (when able). Revive high school internship opportunities (when able).</p>	<p>This program was ready to launch a dual-credit initiative with a local High School. The program was already in the phase to start. This included a position for the project. Unfortunately, two positions were swept and everything was put on hold. The program is hopeful that in the near future, they can resume the goal of creating a dual-credit pathway from High School to our MWIM Program, as requested by Department of Education partners.</p> <p>Course(s) are offered during the evening to accommodate working adults.</p> <p>Program partnered with Astronomy employers to develop an Apprenticeship program. The proposal was completed and sent to the Department of Labor for review. The initiative was halted by COVID, waiting for Astronomy to finalize with the Department of Labor.</p> <p>Program is unable to expand opportunities and critical resources, such as faculty and lab/shop support are needed.</p>	<p>The program grants CO, CA & AAS graduation exit options.</p> <p>The program was combined to meet the needs of Machining, Welding and Industrial Mechanics. Students are equipped to enter various occupations in one of the three areas.</p> <p>Information for these changes was guided by the programs advisory committee. This program works with several apprenticeships and is instrumental in providing instruction, facilities and equipment for those programs to be successful.</p> <p>Graduates in this career pathway are critical for our economic recovery and in this pandemic, are essential workers.</p>
MKT Marketing (CA, AAS)	<p>Recommend continuation of program.</p> <p>Program revisions (finalized in Spring 2022) have resulted in a program that aligns with industry trends and technological advancement(s) while ensuring a deep understanding of cultural and behavioral perspectives, responsibilities, and influences. Courses now provide graduates with the ability to design their own ideas, integrate said designs in and with multiple formats and across multiple platforms, and communicate successfully in an international environment.</p> <p>The program has also undergone a promotional revision (finalized in Spring 2022) with the adoption of a new logo and new promotional materials that will be transformed into a campaign aimed at building relationships with local high schools and small businesses (to be run in Spring and Summer 2022). The new direction of the program presents a clear and distinct</p>	<p>The program has been recently revised to place heavy emphasis on the needs and behaviors of the culture and people of Hawaii. The program now focuses more heavily on culture, brand integration, and portfolio creation.</p> <p>The program deleted seven courses and removed six courses that were no longer industry relevant, added courses in graphic design, videography, economics, and business law, and created two brand new courses focused on international communication and cultural comprehension and technological and brand integration.</p> <p>The program has developed new promotional elements which will be used in a recruitment campaign that is scheduled to run in Spring and Summer of 2022. The new program is heavily focused on building relationships with high schools and community members to ensure a solid pathway that attracts students early and</p>	<p>The Marketing Program is focused on creating qualified graduates ready to serve in managerial/supervisory and advertising/communication positions. It focuses on topics that directly serve the needs of the community and provides opportunities for graduates to take on leadership roles in the private and public sector.</p> <p>The program has recently been revised and updated receiving approval for its final two course additions in the Spring 2022 semester. Program revisions included the deletion of a number of out of date, non-industry specific courses and the addition of two new upper level management and marketing courses focused on professional portfolio development and international brand management and communications as well as multi-platform technological integration. Students now have three paths that they can pursue upon graduation -</p>

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
	<p>outcome that can be easily communicated to a brand new audience of potential students and partners.</p> <p>Some other items of note: If the state follows through with building a coalition to clarify the credential landscape in the state, clear pathways and information sharing on the possibilities for students will be easier and will assist families and counselors in education and career planning. Expand opportunities to include industry as part of the education experience including work-based learning, internships, job shadowing and career days. Industry highlighted the importance of work experience as well as an interest in increased involvement with students. Streamlining pathways for industry engagement will help increase partnerships and support additional opportunities for students. This work will also help increase student awareness of career opportunities within different fields of interest.</p>	<p>carries them through to employment or small business development. Efforts to solidify connections are tied directly to the Spring/Summer 2022 promotional campaign which consists of newspaper, radio, and digital billboard advertisements as well as direct mail outs to high school teachers, counselors, and CTE specialists.</p> <p>Some other items of note: The program is articulated with UHWO and is working on relationships with UHH.</p>	<p>employment, small business, development, and/or transfer towards a Bachelor's degree in Business Administration. These program changes result in a very different program with a different target and different employment and educational outcomes. It provides its graduates with opportunities that were not available prior to program revisions.</p> <p>Some other items of note: State of Hawaii Short-Term forecast says that sales and related occupations industry will produce nearly 10,000 job openings. According to State of Hawaii Employment Projects for Industries and Occupations for 2018-2028, Sales and Related occupations are the third highest projected job openings. According to Promising Credentials Report, Marketing Specialists are in demand. There are not enough qualified candidates to fill positions. Available positions include executives, sales, and accountants. Industry members believe that a lack of interest in certain industries is due to potential employees not understanding what types of positions may be available, many of which pay very well. https://hawaiicareerpathways.org/resources/work-based-learning/career-exploration/promising-credentials/</p>
NSCI Natural Science (AS)	<p>Recommend continuation of the program. Until funding for a physics lab at Manono campus is secured, most students will continue to transfer to UHH before completing their ASNS, but will have completed the majority of the courses and will be well-poised for completing their BA or BS with little more than 2-years of coursework.</p>	<p>We continue to improve the teaching and facilities for the ASNS program. We have completed the construction of a physics laboratory at the Pālanui campus and renovations on the STEM Center on the Manono campus. This will allow us to begin to offer physics labs on at least one campus and substantially improves the teaching and office spaces on the other. We have created a third AS-NSCI track in Ecosystem and Environmental Science that we believe will attract a broader range of transfer-oriented students. We continue to collaborate between the Pālanui and Manono</p>	<p>The A.S. in Natural Science is a transfer program in science and plays a crucial role in the education of future life and physical scientists for the Hawaii community. It provides the education and support necessary for some of the more vulnerable island populations who are interested in a degree in science but do not have the financial or academic ability to start their studies in a 4-year program.</p>

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		campuses in order to reduce the number of low-enrolled courses offered, DE-instruction allows us to do this.	
PRCN Practical Nursing (CA)	Program is on stop-out and looking at local needs, costs and enrollment strategies. After a thorough evaluation the program may be terminated or modified.	The program is not available for Fall 2021 (on stop-out).	The program only admits 10 students in the Fall.
TEAM Tropical Ecosystem and Agroforestry Management (CA) (AS)	Recommend continuation of the C.A.	None specifically for the C.A. See below for actions taken for the A.S.	The Certificate of Achievement (CA) in TEAM is a 1-year certificate embedded within the AS in TEAM. Students have the option of receiving it as a stand-alone after the first year of coursework or receiving it along with the A.S. (after completion of the first year of coursework), or electing to receive the A.S. without the C.A. conferred (even though 100% of the A.S. students have completed the C.A. requirements. This certificate requires no additional input, financial, labor, or otherwise.
TEAM Tropical Ecosystem and Agroforestry Management (CA) (AS)	Recommend continuation of the program when it is safe to return to hands-on learning. Recommend promoting the AS-NSCI-EES degree for students not looking for a terminal degree while maintaining excellence as a terminal degree program. Also recommended to strengthen collaboration with the AEC program with sharing courses such as GIS, Remote Sensing, and Land Management. Schedule courses to be offered in two year cycles that will increase enrollment of class sizes.	Because this is a hands-on learning program that does not smoothly translate to distance learning, we have temporarily stopped offering TEAM courses. Faculty are volunteering through overseeing Independent studies courses to help current students finish second-year coursework and graduate on-time. We have partnered with the AS-NSCI to create a third AS-NSCI track: AS-NSCI-EES that provides coursework for more seamless transfer of students interested in ecosystem management to majors in either Arts & Sciences or the CAFNRM at UHH. We have increased recruitment efforts at local high schools where program faculty are joining HawCC staff to promote the TEAM degrees with potential students.	The A.S. in Tropical Ecosystem and Agroforestry Management is the only program of its kind. The need for locally trained technicians in conservation agencies was recognized in the late-1990s and through collaboration of Hawaii CC faculty with agency leaders, the TEAM program was created. The program creates a pool of workers who have a commitment to staying in Hawaii (as opposed to the earlier strategy of hiring out-of-state technicians who tended to have quick-turnover before leaving for other opportunities). The current program meets the needs of three levels of students: the CA (see above) for those needing a quick educational refresher or looking for an entry level job, or an A.S. that can be terminal for those looking for leader-tech level positions or used as a transfer degree for those looking for management-level conservation positions. This program meets both CTE and Liberal Arts outcomes. With the current political climate, it is likely that the job market in conservation of natural resources and in sustainable agriculture (the

Hawai'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
			two foci of the TEAM program) will be growing markets. Graduation rates have increased by 35% from the 2013-15 average to present average.

**UH Hilo
Small Programs**

UH Hilo Small Program	Recommendation	Actions Taken	Comments/ Improvements
Physics (BA)	Continuation of program	<p>UHH P&A is overhauling its website and increasing its social media presence to increase recruitment.</p> <p>The P&A faculty convene each semester to discuss our majors so we can intervene with struggling students and provide opportunities to those who are ready; both actions improve retention, including revisiting key recommendations for this in the last program review.</p> <p>The Department is also undergoing Strategic Planning with the UHH Strategic Planning Project Manager. This will focus UHH P&A on what stakeholders—current students, alumni, education and research partners, employers, community members—value now and what they want to see in the future.</p> <p>On a longer scale, the process to commission UHH Education Telescope at Halepōhaku; this is expected to increase recruitment and retention and graduates' post-baccalaureate success.</p> <p>Both programs will undergo Program Review in 2024-2025 and an in-depth analysis of these strategies will be evaluated during that normal course.</p>	<p>Physics is a highly versatile degree, preparing graduates for a range of careers (education, data science, etc.); it is also an inherently small program nation-wide. The physics program is well aligned with the astronomy program; UHH P&A has a clear pathway for students to be dual astronomy and physics majors, to the benefit of both programs and the students. Compared to other programs only offering a terminal bachelor's, UHH P&A ranked in the top 40% in number of graduates in 2018–2019; programs with more tended to also have engineering programs, which boost physics numbers.</p>
Astronomy (BS)	Continuation of program	See above	<p>Astronomy on Hawai'i Island is an exceptionally unique and high-visibility major; even though the enrollment is small, it is important to the Island community. For a program only offering a terminal bachelor's, UHH P&A is competitive with other institutions, including larger ones and ones with astronomy PhD programs. For 2018–2019, UHH ranked 3 of 41 comparable, reporting institutions that only offer an astronomy bachelor's degree.</p>

UH Hilo Small Program	Recommendation	Actions Taken	Comments/ Improvements
Gender and Women's Studies, (BA)	Program is presently stopped out.		
History (BA)	Continuation of program	While History was not on the 20-21 list, it is currently looking at pathways and graduation rates as a part of its current program review and self-study. The department plans to implement changes and efforts to address the issue based on recommendations and findings of the review and self-study.	The History Department serves a central role in fulfilling the university's mission to provide students with an education that prioritizes place based learning and Hawai'i. The department offers not just GE courses, but contributes courses to the following majors: Hawaiian Studies, Kinesiology and Exercise Sciences, Anthropology, Liberal Studies, and Education, and the following certificates: Pre-Law Certificate, Pacific Island Studies Certificate, Hawaiian Culture Certificate, Public History Certificate. The Department was not on the 20-21 Small Programs List.
Philosophy (BA)	Continuation of program	Building on the efforts outlined below, Philosophy will develop an enrollment plan focused on re-building the transfer student pipeline. The focus on transfer students is critical to the overall University mission and strategic goals. The department previously had an established pathway with the Humanities Division of Hawaii Community College, and the loss of the Hawai'i CC instructor several years ago can be seen in the precipitous drop in enrollment in this BA. The program faculty will seek to reestablish this pipeline and grow other opportunities from the efforts with Kulani Correctional Facility that are designed to advance the objectives contributing to the needs of the state and restorative justice and of enrolling more adult learners in higher education. Four years ago, the department began a satellite branch of UH Mānoa's highly successful Philosophy for Children (P4C) program, which sends UH Hilo students into local middle schools to discuss philosophical questions. Students in this program will begin coming to college beginning in 2024. This is intended to	The Philosophy Department serves a vital service function at UH Hilo, offering not just GE courses, but upper-level major courses such as Bioethics and Professional Ethics that also serve the following majors: Accounting, Administration of Justice, Art, Biology, Business Administration, Communication, Environmental Science, Gender and Women's Studies, Geography, Japanese Studies, Kinesiology, Natural Science, and Sociology. Students who complete degrees in Philosophy tend to out earn their peers in the liberal arts by the time they are mid-career, in no small part due to the nimbleness of critical thought demanded by the degree. UH Hilo's Philosophy program takes a broad approach, not anchored to traditional texts in order to provide students with an education that well prepares them for a dynamic work-world. 2021 saw an uptick in the program's graduating class (to 9). Although the 2022 graduating class will be smaller, larger freshman and sophomore classes suggest larger graduating classes in the future.

UH Hilo Small Program	Recommendation	Actions Taken	Comments/ Improvements
Mathematics (BA)	Continuation of program	<p>advance freshman enrollments in the future.</p> <p>One of two tracks in the BA Mathematics program was revamped for Fall 2019 rollout. This change allowed more flexibility for transfer students, and created a genuine 2+2 pathway for UHCC transfers. This change also promotes MATH/STEM double majors providing graduates a competitive advantage in the Workforce. Mathematics successfully completed its Program Review during AY 20-21. It has started the process of developing its next generation curriculum to meet current and future student needs, further improving an already efficient program. Mathematics program is currently assisting the development of the Data Science Program funded by an NSF EPSCoR grant. The Mathematics department has increased its advising efforts to ensure its majors successfully navigate the scaffolded curriculum.</p>	<p>A degree in Mathematics provides a quantitative foundation for industry jobs, graduate studies, and fills needs in K-12 and post-secondary STEM education. The Mathematics program has seen increasing enrollment following the 2019 curriculum restructure and had its largest graduating class in over a decade for AY 20-21. While historical numbers show that this level is not sustainable, Mathematics looks forward to continued growth. Approximately 95% of the classes offered in the Mathematics department serve other degree programs across campus. Leveraging these courses the department, on average, offers only 2 courses per semester that serve just Mathematics students. During the 20-21 AY 75% of the Mathematics course offerings were for classes certified as Foundations FQ.</p>
Chemistry (BS)	Continuation of program	<p>Chemistry will consolidate present degree options from three to one by eliminating the current Chemistry and Biosciences concentrations and seek to create a new program designed to support students interested in the Pharmacy Practice Doctorate and students interested in an applied Chemistry degree that builds on UH Hilo's strengths in the Health fields. The curriculum for this new major will be populated from our current list of courses as well as courses from DKICP. This new degree will serve as a robust pipeline for UH Hilo freshmen to admission into our PharmD program, as well as medical and biomedical programs while earning a chemistry degree in the process.</p>	<p>UH Hilo's Chemistry program has perhaps the largest service load of any department. Chemistry serves more than 12 other majors, yet those programs get all the graduation rate credits for a very large portion of Chemistry's teaching load. Chemistry, the central science, is highly interconnected to other disciplines which include agriculture and food science, both major sources of revenues for the Big Island.</p>
Performing Arts (BA)	Continuation of program	<p>Through the process of self-study in preparation for program review, the Performing Arts program noted that students were hindered in progress by the design of the degree and that this may contribute to reductions in enrollment as well. In preparation for the external review,</p>	<p>The program serves a unique need and is well supported by the arts community on Hawai'i Island. The program also provides a substantial number of GE courses each semester and is a pioneer in distance education for the campus.</p>

UH Hilo Small Program	Recommendation	Actions Taken	Comments/ Improvements
		<p>a potential programmatic redesign has been submitted and revised. These changes, along with feedback expected from the external reviewer, will better serve students and develop a clearer path to graduation and capitalize on UH Hilo's distinctive features.</p> <p>The program has also noted that students are seeking more interdisciplinary options and is presently exploring designs that could support a growth in enrollment through revised programming.</p>	
Geology (BA/BS)	Continuation of program	<p>Geology is piloting a new recruitment effort that targets AA transfer students from community colleges offering introductory geology courses, focusing on in-state community colleges and community colleges in states that send WUE students to UH-Hilo. This is in keeping with the University's overall goals to improve transfer outcomes.</p> <p>For a major that is usually "found" by students after arrival in higher education, exposure at an early point is essential to building Geology's enrollments. In response, the second course in the geology freshman sequence was just certified as a GE course, potentially serving as a gateway.</p> <p>As of this year, the department is contributing a core course to the new sustainability certificate.</p> <p>We are petitioning administration to hire a volcanologist, a position that has been vacant for five years, to restore capacity to our department.</p> <p>The department is capitalizing on the unique opportunities of the Big Island by developing closer ties with the Hawaiian Volcanoes Observatory (HVO), which is relocating to campus. This will provide students with an exceptional opportunity to collaborate with HVO scientists.</p>	<p>The UH-Hilo Geology program is unique due to its location on the doorstep of active volcanoes. It draws students interested in volcanology and provides authentic field and laboratory experiences in an active volcanic environment. Faculty and students collaborate with the Hawaiian Volcano observatory to support community needs during eruptions. The program also trains students in environmental geology, filling a workforce need.</p> <p>Course offerings have been developed that serve both the Geology major and the Environmental Science major.</p> <p>Two tracks (B.A. and B.S.) with different requirements in math and chemistry provides flexibility that increases retention without the need for additional geology courses.</p>
Natural Science (BA)	Continuation of program	<p>In AY 2019-2020, an articulation agreement between UH-Hilo and Hawai'i Community College was signed. This agreement, which links the UH-Hilo Natural Science program,</p>	<p>The interdisciplinary Natural Science program provides a solid base in the fundamental sciences plus a concentration in biology, chemistry, earth science, or</p>

UH Hilo Small Program	Recommendation	Actions Taken	Comments/Improvements
		Hawai'i Community College and the UH-Hilo School of Education program, is intended to produce home-grown science teachers.	physics. The program is designed to train students who will become science teachers in rural schools and also serves to retain students with broad interests. Apart from a capstone course, this is a no-cost program built on courses already offered by other departments. This program fulfills a workforce, state and UH need in providing well-trained STEM area teacher candidates.
Japanese Studies (BA)	Continuation of program	Recognizing the considerable student interest in the diverse certificates already available, the Program is exploring the feasibility of a more comprehensive Asian Language and Culture BA that builds on the strength of the BA and the certificates. An ATP has been reviewed and will be considered in the context of the program review scheduled for 2021. Japanese Studies (and ALC) provides pathway building for internships and job opportunities in private, public, nonprofit sectors, business and healthcare professions. The newly approved Japanese Teaching Certificate program may help with career opportunities and provides new enrollment through the agreement made between UH-Hilo and Toyo University in Japan.	The strength of Japanese Studies' link with the local community was noted back in the 2006 Program review: "The Japanese Studies Program at the University of Hawai'i at Hilo is a response to the mission of the multiculturalism and promotion of cultural diversity while supplementing a strong interest in the local ethnic community of Hilo and the Big Island." Given the huge importance of Japanese tourism to the State, having access to Japanese language instruction represents gainful employment opportunities for students. This accounts for the high graduation rate of over 90% for this program. The department serves several highly successful certificate programs in addition to the BA and high SSH production for General Education service courses.
Hawaiian Language and Literature (MA)	The program is stopped out.		
Heritage Management (MA)	Continuation of the program pursuant to successful completion of both reviews underway.	The Heritage Management program admitted 4 new graduate students in the Fall 2021 semester. Two of these students are assisting with the MOA with the Hawaii Dept. of Transportation which funnels \$1.25 million to UHH to study cultural sites associated with the Queen Ka'ahumanu Highway in North Kona. The department is in the process of completing its program review and has submitted its request to seek permanent status from the BOR in 2021.	The Heritage Management program operates on a cohort basis with the department retaining the same number of faculty as it had before the program began. It has been admitting small graduate cohorts on alternate years (2015, 2017, 2019, 2021). The program meets a state workforce need for producing professionals in cultural resources, has a high retention rate, and graduates have found leadership jobs in State government and the private sector, including the Edith Kanaka'ole Foundation, the Hawai'i State Historic Preservation Division, the Hawai'i County

UH Hilo Small Program	Recommendation	Actions Taken	Comments/ Improvements
			Planning Office, the Office of Hawaiian Affairs Lands Division, and principal investigator positions with private consulting firms that specialize in cultural resources.
Hawaiian & Indigenous Language and Culture Revitalization (PhD)	Continuation of program	<p>The new cohort started in Fall 2020 with nine new Ph.D students. The program draws from local, national and International students in this high specialty area focusing on language and culture revitalization. Graduates of this program are making incredible contributions to Indigenous language revitalization and recovery. The college is actively seeking additional student scholarship funding to assist with student retention. The college is currently exploring a B plan option to meet growing interest and demand with current resources to effectively sustain the program.</p> <p>This program is experiencing growing interest among our indigenous peoples and as well as our local population of Hawaiian speakers. Faculty teach both undergraduate and graduate programs. We continue to review and analyze potential innovative strategies to meet program goals with available resources to be able to effectively sustain all of our graduate programs. We anticipate increased enrollment in our modified MA programs and as such we anticipate that they will continue their post graduate education in pursuing a doctoral degree.</p>	The Ph.D. in Hawaiian and Indigenous Language and Culture Revitalization (PHD HILCR) has a unique status within the University of Hawai'i system - it is the first doctorate in a Hawaiian Studies field and the first doctorate in the world specific to the growing field of Indigenous language and culture revitalization. The program began with provisional status in 2006 with Hawaiian and other Indigenous candidates and was approved as an established program in 2015.
Pharmaceutical Sciences (PhD)	Continuation of the program pursuant to successful completion of both reviews underway.	<p>The inaugural class of 2011 (7 students) have all graduated and nine students are currently in the Program. One student completed in 2021. Two students are preparing to graduate in 2022.</p> <p>The Pharmaceutical Science Faculty have collectively secured over \$10.3M in grant funding since 2011. Graduate students were directly supported by some of these grants. The work of graduate students ensured the successful execution of project objectives. In a few cases, graduate student research accomplishments formed</p>	This Ph.D. program offers the only science-based PhD degree at UH Hilo, and the only graduate degree in Pharmaceutical Sciences in the state and Pacific region. This program has contributed to the economy of the state by producing graduates with high level expertise in the health sciences who ultimately found gainful employment in the health and academic sectors of the Big Island. It also makes UH Hilo eligible and/or more competitive for important funding opportunities at the national level.

UH Hilo Small Program	Recommendation	Actions Taken	Comments/ Improvements
		the foundation for successful grant applications.	<p>Nationwide and international interest in the Program remains robust, with an average of 60 inquiries of interest received throughout the year, and 8 completed applications processed each admissions cycle.</p> <p>Diversity is a core value of the Program. Past and present students (16) have included six underrepresented students, 5 of whom are residents of the state. The UR students comprised 3 native Hawaiians from the Big Island, and 1 student each with Hispanic and Native American heritage. Two non-UR students are also from the state.</p>

**Honolulu Community College
Small Programs**

Honolulu CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
Aeronautics Maintenance Technology (CA)	Continuation of program	Students will be encouraged to complete the CA requirements before earning their AAS.	The CA can be earned along the way to an AAS. Program awards over 10 AAS degrees annually.
Architectural, Engineering and Construction Technologies (CA)	Continuation of program	Students will be encouraged to complete the CA requirements before earning their AAS.	The CA can be earned along the way to an AAS. Program awards over 10 AAS degrees annually.
Automotive Mechanics Technology (AAS)	Continuation of program and monitor enrollment to assess effectiveness of the program modifications.	Students have been accepted out of course sequence and faculty are working one-on-one with students to improve success rates; program is evaluating their course scheduling; and starting Fall 2022, program is planning to switch all courses to morning sessions.	Evaluation of the program is on-going.
Communication Arts (AAS)	Program has been stopped out.	Teaching out remaining students.	
Computer, Security and Networking Technology (APC)	Continuation of program	Completing the CAECD application for recertification. Faculty have been involved in System IT discussions with workforce to improve marketability of graduates. ARPD Demand and Efficiency Indicators are "Healthy" while the Effectiveness Indicator is "Progressing" and trending in a positive direction. Although persistence rates have dropped slightly, transfers to UH four-year institutions have risen considerably.	The Advanced Professional Certificate is designed to provide students with advanced technical training in ICT with an emphasis on Information Assurance. Program articulates to UH West O'ahu and Maui College. AAS program is strong.
Diesel Mechanics Technology (AAS, CA)	Continuation of program	FY21 ARDP program indicators show Demand and Efficiency as "Healthy" and Effectiveness as "Progressing." Enrollment was impacted by the pandemic because all core courses are in-person. Some students reduced credit load or withdrew.	Admission for the program is every other fall semester and it takes two years to complete the program, so a yearly average will be low.
Early Childhood Education (CA)	Continuation of program	Students will be encouraged to complete the CA requirements before earning their AAS.	The CA can be earned along the way to an AAS. Program awards over 10 AAS degrees annually.
Electrical Installation and Maintenance Technology (AAS, CA)	Continuation of program	There is a waitlist and high demand for this program; however, we are in the process of retrofitting new facilities and can only offer courses to one cohort of 24 students (versus our usual two cohorts). Once facility improvements are close to completion, we will recruit a new faculty and work closely with industry on building the pipeline for potential instructors.	The three-year averages are increasing (4.3 to 9.3 for CA and 8.3 to 9.3 for AAS).

Honolulu CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
Fashion Technology (AAS, CA)	Continuation of program and monitor enrollment to assess effectiveness of the program modifications.	Revamped the program to align with UH Mānoa to assist students who wish to transfer and will be working on an articulation agreement. Enrollment has been impacted by the pandemic because many of the courses are in-person and class sizes were reduced for social distancing.	Our sole full-time faculty who led the program retired December 2021. Requesting to fill the position this semester.
Hawaiian Studies (AA)	Continuation of program, but evaluate if tracks need to be modified.	This program supports the UH System's Hawai'i Papa o Ke Ao plan of being a model indigenous-serving institution and is fully transferrable to four-year institutions. The faculty are part of the AA Liberal Arts program and plan to offer a yearlong schedule for 2022-23.	The AA three-year average is increasing (3.3 to 4.7).
Human Services (AAS, CA)	Continuation of program but evaluate program to increase enrollment and outcomes.	FY 21 ARPD program indicators show Demand and Efficiency as "Healthy" and Effectiveness as "Progressing." The program continues to maintain strong academic program quality with relevant coursework and service-learning opportunities with transfer paths to both UH and non-UH four-year institutions.	Class size averages 20 students; supports other programs.
Natural Sciences (AS)	Continuation of program and monitor enrollment to assess effectiveness of the program modifications.	The STEM Center opened in 2019 and there was increased student interest until the pandemic. Virtual workshops and events were not as successful as in-person ones. Program modified curriculum to better support transfer students and is working on a yearlong schedule.	The AS three-year average is increasing (3.7 to 4.0).
Occupational Environmental and Safety Management (AS, CA)	Continuation of program and monitor enrollment to assess effectiveness of the program modifications.	FY21 ARPD program indicators show Demand and Effectiveness as "Healthy" and Efficiency as "Needs Attention." Course scheduling has been streamlined as demonstrated by the improving course fill rates and reduced number of low enrolled classes. A new articulation with UH West O'ahu was signed.	Our sole full-time faculty who led the program retired. Requesting to fill the position to assist with future curricular changes and improve student recruitment.
Refrigeration and Air Conditioning Technology (CA)	Continuation of program	Students will be encouraged to complete the CA requirements before earning their AAS.	The CA can be earned along the way to an AAS. Program awards over 10 AAS degrees annually.
Sheet Metal and Plastics Technology (AAS, CA)	Continuation of program	Enrollment has been impacted by the pandemic because many of the courses are in-person and class sizes were reduced for social distancing.	There has been a renewed commitment by the industry to support the program and graduates.

**Kapi'olani Community College
Small Programs**

Kapi'olani CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
<p>MICT (Mobile Intensive Care Technician) (AS, CA)</p>	<p>Options: Continuation of the program.</p> <p>Incorrect Data: The MICT Program enrolled (new students): Spring 2021- 20 students Fall 2021 Graduated- 18 Fall 2021-18 students</p> <p>There are no programs in Hawai'i with which to merge other than ourselves, which we have implemented. Termination of the program would result in a sudden and severe shortage of workforce for all EMS agencies including Hawai'i Fire Department, City & County of Honolulu EMS, and AMR on all islands. This reduction would have an immediate and negative effect on public safety and care of the ill and injured. Although we have consolidated the didactic in an online asynchronous format which provides increased efficiency, we struggle to find the resources to expand. The entire EMS Department has 1 FT clerk secretary in Hilo, a halftime assistant on Maui, and zero support in O'ahu. The Program previously recommended to the College that the Paramedic Program terminate the CA and require all students to earn an AS. An AS is an additional 6 CH. We currently have an articulation agreement with UH-West O'ahu. Currently, offering both CA and AS contributes to the inaccurate idea that the Program is smaller than it actually is. Additionally, incorporating AEMT into the first semester would provide completers with a CA. The majority of students' attrition out in the second and third semesters. An AEMT certificate would allow them a higher status even if unable to complete</p>	<p>The paramedic program piloted an asynchronous online blended program (AOBP) in Spring 2021. The didactic portion was delivered as one cohort which reduces instructor TE and increases enrollment. This was expanded into Maui F2021. The CORRECT data illustrates the increase in enrollment and graduation upon implementation of the AOBP. Advantages include</p> <ol style="list-style-type: none"> 1. Increased efficiency in the assignment of EMS faculty and staff. Reducing overload and strategically assigning workload. 2. Increased enrollment in didactic sections to support potentially lower enrollment on neighbor islands. 3. The ability of agencies to utilize personnel operationally is expected to translate into increased enrollment in the future. 	<p>The Paramedic program is the only accredited training program for the state of Hawai'i. Paramedic education is provided state-wide by KapCC with training centers on O'ahu (KapCC), Maui (MC) and Hawai'i (HawCC). Public safety employers in Maui County and Hawai'i Island often, due to operational demands, cannot release more than 10 EMT's to be trained as Paramedics in one cohort. This has resulted in low enrolled programs in the past.</p>

Kapi'olani CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
	paramedic. Currently, fire departments are looking for ways to expand their workforce without the education commitment to the paramedic level. This would potentially allow Program expansion, provided the College was willing to provide adequate resources for expansion, and assist stakeholders in meeting community workforce needs.		
Dental Assisting (CA)	Options: 1. Continuation of program 2. Expansion of program to meet industry needs in anticipation of change to regulatory requirements for Dental Assistants in Hawai'i. Industry needs have increased during the pandemic.	Curriculum change: The program submitted program change proposals through the Curriculum Committee of the Faculty senate and to CODA to eliminate 13 credits of GEN ED courses. The program still qualifies for CODA accreditation. The changes were approved in 2019 for AY 2020. Completers of the two-semester of Dental Assisting courses now earn the CA. Since then, the number of completers has more than doubled. The program's clinical area was expanded to allow for the program to accept at least 18 students each academic year. The enrollment increase was approved by the college and CODA for AY 2021. The program had a record applicant pool of more than 30 for AY 22, but only 12 students ended up enrolling. Those who withdrew their applications cited reasons related to COVID for not being able to participate at this time.	The program is the sole source for Hawai'i for Dental Assisting education accredited by the American Dental Association's Commission on Dental Accreditation (CODA). Certificate of Achievement (CA) completers are immediately qualified to sit for the Dental Assisting National Board exam. The program addresses employment demand for the local and national dental community. The accredited program was first proposed as a pathway to Dental Hygiene at UH Mānoa or UH Maui College. For this reason, the CA initially included 13 credits of general education courses which were common to DH prerequisites. The number of completers of the GENED courses was less than 50%, yielding graduation rates that did not accurately reflect completion of DENT coursework.
MEDA (Medical Assisting) (AS)	Options: 1. Continuation of program 2. Develop articulation agreements with UH-West O'ahu in Healthcare Administration and Health Professions. 3. Develop an articulation agreement with HPH/DOE for their medical assisting pathway graduates to enter the AS degree program.	In 2018, the MEDA program partnered with Hawai'i Pacific Health to deliver the CA curriculum in a non-credit format to qualified high school seniors. 17 students successfully completed the program. In 2019, the MEDA program partnered with the Queen's Healthcare System and accepted an additional cohort of CA students. 8 students successfully completed the program. The MEDA program partnered with UH-West O'ahu and created a pathway to the Health Information Management baccalaureate program. The resulting articulation agreement ensures a seamless transition for the AS degree student.	The program curriculum provides additional certifications that students can earn to increase their employment options and earnings potential. The AS degree and/or CO in Healthcare Practice Management qualifies them to sit for the Certified Professional Coder certification and provides them with the background to also sit for the Certified Physician Practice Manager certification. All program students complete the 1-year CA program. Students can either exit the program at that time or continue for an additional year in the AS degree. In 2017, a smaller than usual cohort was accepted into the program which resulted in

Kapi'olani CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		The Dean is currently working with UH-West O'ahu on articulation agreements for all our Associate Degree health programs to their Healthcare Administration and Health Professions baccalaureates. The MEDA program and the Dean are also looking at an articulation agreement between the Hawai'i Pacific Health high school medical assisting program and the AS degree. There have been students interested in entering the AS degree program from the high school pathway.	a smaller than usual 3 year average graduation rate.
NSCI in Biotechnology (CA)	Continuation of program	We have strengthened our collaboration with the MLT program. MLT is now recommending and may require that all students complete this certificate as part of the requirements this program.	This program offers academic and laboratory training in molecular biology, microbiology and cell biology. It is a useful certificate for Medical Laboratory Technician (MLT) students, offering them training and experience that they do not obtain in the MLT program. It is also attractive to those ASNS students that have molecular bioscience interests. These courses are also taken by undergraduate research students in KCC's NIH funded INBRE program, (100,000 / year direct fund for the past 12 years). A number of our students have been directly hired by local COVID testing laboratories because of the training we give them. There are currently eleven students in the program.
Information Technology (APC)	<ol style="list-style-type: none"> 1. Continuation of program 2. Require program to grow to meet criteria by next review. 3. Review program requirements to provide the student a real chance to earn this certificate. 	Announced repeatedly that the APC is still an active certificate that can be earned with the appropriate amount of credits. Began Memorandum of Understanding (MOU) agreement with Continuing Education to add more students into APC courses. Also, created course offerings for the O'ahu Back to Work program that were modeled after APC courses. Continued to work with Continuing Education in supporting their efforts to recruit returning adult learners.	Many of our graduates' matriculate to bachelorette programs at both UH West O'ahu as well as UH Maui. This relationship has been very successful and will continued to be both broadened and strengthened in the future. The APC program has provided KCC graduates to take advanced level courses without needing to travel to UHWO or UH Maui. In addition, since opening channels with Continuing Education, these courses have been offered as another resource for industry professionals looking to continue learning advanced technical skills.

Kapi'olani CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
<p>Paralegal (CA)</p> <p>Please note that two time periods of data were provided: a 4.0 3-year average for 2017-2019, a 7.3 3-year average for 2018-2020, and a 9.3 3-year average for 2019-2021. However, the first time period included the year before the CA became effective, so it contains only two years of data and should be discarded. This report will focus on the 2019-2021 period. Please note that the ARPD data differs from the statistics provided to the program coordinator.</p>	<p>Continuation of program</p>	<p>Given the continued applications and interest in the CA, and the fact that the courses are required courses in the AS. College, resources are being used wisely as overall enrollment in the law courses for the combined CA and the AS students continues to remain high. For example, as of the first day of classes in Fall 21, the overall course enrollment rate for the program (CA and AS) was 90%, and as of the first day of classes in Spring 22, the overall enrollment for all the courses in the program was 85%.</p> <p>In addition, due to changes in the American Bar Association guidelines for online education in Fall 2019, the paralegal program is now able to offer all of the courses for its certificate of achievement and sufficient courses for the A.S. degree in paralegal, so that both credentials may be offered entirely online. This has opened an untapped market for the paralegal program, as prior to this, neighbor island students could take selected individual courses, but never sufficient courses to earn a credential.</p> <p>The program has also entered into a new articulation agreement with the political science department at UH Mānoa. It is expected that the articulation agreement, all online program, and continued marketing will help with increasing all student enrollment.</p>	<p>This 9-course (two semester) program first started enrollment in Fall 2017, so there was the normal slow roll up in enrollment for the first year. It is well known that the majority of community college students are part-time, not full-time, so it was not reasonable to expect a large percentage of students who started in Fall 2017 would graduate in the first year. According to the ARPD stats, there were 0 CA graduates in 2017-18, 7 in 2018-2019, 10 in 2019-2020, and 12 in 2020-2021. The trend in enrollment is clearly upward. In addition, it should be noted that all of the courses in the CA are also required courses in the AS Paralegal. Running the CA supplements the course enrollment for the AS, which has a healthy enrollment and graduation rate.</p>
<p>Hospitality Operations Management (APC)</p> <p>Courses first offered in the spring 2016 semester.</p>	<p>Options: Continuation of program With continued effort to raise enrollment.</p> <ul style="list-style-type: none"> • Promote the successful APC graduates <ul style="list-style-type: none"> ✓ Created a promotional video ✓ Documented grad testimonials ✓ Enhance web site (in process) ✓ In class presentations (do so in 200 level courses, specifically HOST 293 - Internship) ✓ Counselor e-blasts 	<p>As of Fall 2021 11 semesters</p> <ul style="list-style-type: none"> • 65 unique students have taken 300 level HOST Courses. • 39 of the 65 students (60%) have transferred or plan to transfer to UHWO. • 11 students have completed the BABA in Hospitality and Tourism from UHWO. • 40 out of 48 (83%) of the students have successfully earned the Certified Hotel Industry Analyst (CHIA) 	<ul style="list-style-type: none"> • Hospitality is Hawai'i's biggest employer, accounting for approximately 23 percent of the economy. • There has been substantial growth in a new type of guest/owner that is involved in fractional ownership, timeshares, and second homes. Because of this shift, professionals need to better understand Timeshare operations, the value of Lodging Analytics and Revenue Management, Sustainability and Strategic Leadership.

Kapi'olani CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
	<ul style="list-style-type: none"> ✓ Social media (do so via Facebook and Instagram) • Reach out to students that have taken a course or two but have gotten busy in their careers and encourage them to return. • Have met with HLTA president Mufi Hanneman to develop a program to support incumbent employees that may have earned an associate's degree and might see a value in continuing their education. Discussion centered on HLTA creating a scholarship application process that would award full tuition to two or three employees. • Have had conversations with Professor Susan Kazama on what can be done to energize the MOU agreement created with Continuing Education that was developed in the spring 2021 semester that enables incumbent hospitality employees to take the 300 level courses as Non-Credit classes. • As each of the HOST classrooms/labs are equipped with distance education technology, continue to promote the APC program to neighbor island HOST AS graduates. To date none of the neighbor island graduates have matriculated to KCC HOST for the APC program. • Consider accepting students into the APC from other, non-hospitality majors. The logical first step would be business majors as they would have taken two important courses in preparation of the APC content, marketing and management - as well as culinary graduates. • The spring 2021 conversation with the faculty of the TIM School at Mānoa was unproductive in moving forward the development of an articulation 	<p>designation from the American Hotel and Lodging Educational Institute (AHLEI).</p>	<ul style="list-style-type: none"> • HOST KCC APC has developed a seamless articulation agreement with the University of Hawai'i at West O'ahu (UHWO). Students earn a Bachelor of Arts in Business Administration (BABA), with a concentration in Hospitality and Tourism.

Kapi'olani CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
Culinary Arts (APC)	<p>agreement that would include the 300 level courses.</p> <ol style="list-style-type: none"> 1. Request for the Continuation of the program. The Culinary APC is tied closely to the development of Phase II of the Culinary Institute of the Pacific. The CIP will be the center for advanced academic culinary training. Both the success of the APC academic program and the success of CIP hinge on each other. 2. The program should be focused on how the courses thrive (fill rates) as opposed to certificate completion. Part of our goals is to award the CULN APC, however, the success of the courses should be based on drawing individuals to the CIP and Culinary Innovation Center as a hub for advanced training. 	<p>The program will look to revise its APC curriculum during the summer to attract a new untapped market of students including industry professionals and culinary enthusiasts.</p> <ol style="list-style-type: none"> 1. Summer 2022: APC curriculum revision 2. Fall 2022: submission of revision 3. Approval of APC curriculum changes 4. Fall 2023: new APC curriculum implemented 	<p>The impact of the COVID pandemic has affected the APC program enrollment fairly significantly. The AY21 to AY22 has shown a decrease in the Fall comparison (-18%) and an increase in Spring numbers (+15%). As in previous years, two of the three classes were highly populated by the HOST APC students.</p> <p>The CULN APC will be looking to revamp its curriculum in order to increase enrollment. The focus will be on credentialing and the development of specialized courses that are not part of a traditional culinary curriculum but are part of the nouveau culinary industry/culture in which additional training/education is necessary.</p>

**Kaua'i Community College
Small Programs**

Kaua'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
Accounting (AAS) CPR fall 2018	Continuation of the program	Plans for professional certifications from other reputable industry organizations such as the Internal Revenue Service and/or National Bookkeeping Association, and American Payroll Association will fortify the Tax Preparer and Payroll Preparer CAs, respectively. The program has ACCJC approval to deliver courses online and has increased online offerings. Optimized the program schedule coordinating with other UHCCs to increase fill rates. Assessed existing certificates for relevance and existing demand to effect adjustments or terminations where warranted. Eliminated the Accounting Office Assistant certificate as obsolete due to technology and automation	The Accounting program is in a Healthy status supported by strong Demand, Efficiency, and Effectiveness category ratings. A strength is the inherent need for accounting knowledge and skills in all industries, public, private, government, and not-for-profit. There were 67 CAs and 54 COs awarded that meet local industry needs. The number of program majors increased from 45 to 57 over the last three cycles while the percentage of part-time students decreased from 31% to 15%. 18 students obtained external certification credentials for QuickBooks (up from 8 students in 2019-20).
Automotive Mechanics Technology (AAS) CPR/NATEF Accreditation 2023	Continuation of the program	This is the only UHCC program that trains on hybrid and electric vehicle technology with ADAS and driverless autopilot controls. And is the only program participating in the ASE sponsored voluntary testing with scores in the top 20th percentile nationally. The program addressed problems with Math acting as a gateway course preventing student completion. Early warning indicators improved collaboration between MATH and AMT faculty for increased student success. Fall to spring persistence improved from 77% to 86%. Relevant industry skills from this program were placed under the AMT degree as a Non-structural Analysis and Damage Repair CA and will contribute to increased program enrollment.	Overall, this program rates as healthy. This is a high demand program with NATEF certification. County workforce needs shows new and replacement positions ranging from 39-26 over the last three cycles and private sector demand is high with requests for current students and graduates to fill vacancies. Part-time enrollment in the program has increased to 44% since COVID with more students needing to work. The program is touted as one of the top 50 automotive programs in the USA by AutoMechanic School Edu based on its NATEF accreditation, internship experiences, extensive campus shop practice time, job placement assistance, ASE certification prep course, and supplemental certificate programs.
Business (Certificate and AS) CPR fall 2023	Continuation of the program	The program received ACCJC approval for fully online delivery and followed with UH approval to be offered and listed as a UH fully online (asynchronous) program. The program works closely with an advisory board to ensure industry relevance. The program has expanded class offerings	Overall, this program rates as healthy. The modality shift to asynchronous online makes the program accessible to more students and consequently the majors have increased from 40 to 68 over the last three cycles with NHs comprising nearly 50% of program majors. The number of majors has

Kaua'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		through the Early College program. Program faculty and lecturers place high focus on student engagement practices. The program is streamlining, aligning, and scheduling courses more effectively to increase degree retention and degree attainment.	grown and has remained healthy for the previous five years. This recently established program has high demand with the amount of new and replacement county prorated positions (91) compared to the current majors (68).
Carpentry Technology (CARP) (Certificate and AAS) Comprehensive Program Review (CPR) fall 2022	The program is being aligned with the Building Construction Technology program with changes also in the Electrical Installation and Maintenance Technology (EIMT) and Facilities Engineering Technology (FENG) programs.	This program expanded to Kaua'i HS and Waimea HS as part of the Early College program, replacing the terminated Construction Academy program. For increased efficiency and effectiveness, the program is being consolidated with the Electrical Installation and Maintenance Technology (EIMT) and the Facilities Engineering Technology (FENG) programs. Enrollment increases are anticipated through the merger of the three programs as part of "right-sizing" for KauCC and UHCC. The proposed merger has gone through the campus curricular processes fall 2020. OVPCC has noted that the, "Campus should take action on this recommendation, as appropriate, considering cross campus alignment with similar programs" such as Construction Technology at UHMC.	Overall, this program rates as healthy. Industry demand is high with over 1,000 jobs available in the state and 71 (county prorated) for the construction industry in 2021, and is the sixth largest industry in the state. Thus, the program is important for meeting current workforce needs. Actions to consolidate and align this program will increase enrollment, strengthen offerings, meet industry needs, and aid resource management.
Creative Media (AS) CPR fall 2024	Continuation of the program	Effective fall 2022, a streamlining and optimization plan will be implemented eliminating 4 low-enrolled intermediate-level courses and converting 7 COs into just 2 CAs. Changes have been requested for SOC-CIP codes. OVPCC has indicated that it will coordinate a system-wide CM forum towards a, "strategy to ensure that programs are meeting workforce needs and providing avenues to living wage jobs." The program will work towards UHCC goals for alignment and enhanced resource management.	This newly created program is in provisional status and has an overall health rating of cautionary. The majors have increased from 40 to 56 over the last three cycles and increased by over 2.5 times since the program inception. Part-time students have decreased from 63% to 56% however time to degree completion is extended, and three to four years to graduation is anticipated. Certificates awarded increased: 4 in 2019; 19 in 2020, and 14 in 2021.
Culinary Arts (AAS) CPR ACF Accreditation 2024	Continuation of the program	The program has operated a second academic year with the loss of one faculty member and without use of lecturers or excessive overload. Faculties serve on the Integrated Student Success Committee and participate in initiatives to enroll students	This program has an overall health rating of cautionary. This program serves to meet a high demand workforce need. Accommodation and food services are the top industries for Kaua'i county with over 8,000 jobs and 344 new and replacement

Kaua'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		and assist with onboarding. Faculties mentor students one-on-one. The program has articulated and aligned with all UHCC Culinary programs. The program designed and implemented a Culinary Technical Mathematics course to improve student success. The program is working with the HLTA in Kaua'i that has been reaching out in a desperate search for student graduates to meet current demands and to provide potential solutions to crisis understaffing (US press releases and data show this is a national struggle for recruitment and retention in the industry).	positions in 2020-2021. The program runs as a cohort of 20 students, serving 40 maximum students (first- and second-year cohorts of 20 students each). The second year always had some attrition with students entering the workforce after year one. Pre-pandemic enrollment was at 35 and is currently down to 18 total students.
Early Childhood Education (Certificate and AS) CPR fall 2020	Continuation of the program	The program is collaborating with other UHCCs to review the career pathway, articulation agreements with UHM and UHWO, and examining apprenticeship models. The program regularly engages with its advisory committee which includes preschool directors, high school principals, and a member of the state legislature. The program has increased the number of courses it can offer in DE format and has collaborated with other UHCCs to optimize scheduling and to share some low-enrolled courses. The program is seeking programmatic accreditation. A biennial student focus group will be conducted spring 2022.	This program has an overall health rating of cautionary. The college regularly receives solicitations for graduates and regular contact with local employers shows workforce demands are not being met with a shortage of qualified preschool teachers in the county. This program serves an essential island labor need by providing graduates in service to 35 early childhood programs that are both private and public-funded on Kaua'i.
Electrical Installation and Maintenance Technology (EIMT) (Certificate and AAS) CPR fall 2022	See Carpentry Technology	See Carpentry Technology. Curricular revisions have occurred.	Consolidating with Carpentry Technology (CARP) and Facilities Engineering Technology (FENG) to form a Building Construction Technology program.
Electronics Technology (Certificate and AAS, AS) CPR fall 2023	Continuation of the program	The program is working to increase enrollment thru outreach, increasing engineering courses offered via DE, and through involvement in high profile projects such as the IMUA project/the Hawai'i Space Grant Consortium. The program again gained national recognition as students put a science payload in space as part of a NASA sponsored internship on the RockSatX program. The rocket was launched from NASA Wallops in August 2021. Video from space	This program has an overall health rating of cautionary. This program was created to meet the demand for technicians on Kaua'i with local employers such as PMRF actively seeking program graduates and additionally soliciting Cyber training options. The college is unable to meet local employer demand, and 100% of the graduates are placed in high paying positions, often prior to their graduating. The program has been unable to revise and expand due to short staffing with only one

Kaua'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		has been used for recruitment efforts. The program will collaborate with other UHCCs towards resource management and is sharing some courses. The program is seeking another faculty member to meet county demands and inquiries from the BOR and state legislature as to what KauCC is doing to better meet country demands in this field.	faculty member. Despite operating a small program, KauCC offers a quality, competitive program that ensures individuals on this island have a pathway to a high demand, high paying STEM profession that moves the county beyond tourism-based opportunities.
Hawaiian Studies (AA) CPR fall 2020	Continuation of the program.	<p>Majors increased from 11 to 13 on this last cycle. Courses have shifted modalities with more online and hybrid offerings to meet student needs during the pandemic (though students might prefer and benefit from in-person instruction they may not choose to be vaccinated or be interested in weekly testing required for in-person classes). The program has begun experimenting with 8-week courses for increased student success potential. The program is planning a summer boot camp to promote student engagement, prepare students for year two, and to create a second-year capstone activity.</p> <p>The program is collaborating with other UHCCs towards alignment, online offerings, and collaborative scheduling as relevant and where in best service to students.</p>	<p>This program has an overall health rating of progressing.</p> <p>This culturally and historically significant program helps to deliver on the universities' commitment to being a premier indigenous serving institution and to deliver on the Hawai'i Graduation Initiative for increasing the number of native Hawaiian graduates.</p>
Hospitality and Tourism (AAS) CPR fall 2021	Continuation of the program	<p>The program is working with the HLTA in Kaua'i that has been reaching out in search for student graduates to meet current demands and to provide potential solutions to crisis understaffing. The program regularly runs Early College courses leading to a certificate for Kaua'i High School. Property visits occur to promote PLA opportunities within the program. The program terminated a CO and replaced this with a more relevant CA. OER materials were developed and implemented to reduce student costs. DE offerings have increased during the pandemic to meet student needs with ACCJC substantive change approval for online delivery. Collaborations occur with UHMC to provide online case simulations to support 21st century skills and cognitive thinking within</p>	<p>This program has an overall health rating of healthy.</p> <p>Accommodation and food services is among the highest demand industries on Kaua'i and within the state of Hawaii with over 100K jobs within the state and projected jobs expected to continue to increase. Kaua'i has over 8,000 jobs. Considering the dominance of the accommodation and food service industry on Kaua'i it would be illogical to not continue this program. Additionally, the county will rely on this industry during COVID economic recovery while other state/county strategies are explored to lessen dependence on this industry. Program costs are minimal with only one full time faculty member. The program has</p>

Kaua'i CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
		the program. The program is focusing on 21st-century skills, regenerative tourism, cultural sustainability, and the UN Sustainable Development Goals. International partnerships via webinars have been fostered.	worked to improve scheduling for enhanced resource management.
Natural Sciences (AS) CPR fall 2023	Continuation of the program with the additions of a PBTA/Agriculture concentration and an Environmental Science concentration while exploring UHCC collaborations for specialized courses.	KauCC approved adding an agriculture/ environmental science concentration under this degree thus moving students from the terminated PBTA AS. This action will increase degree enrollment. This concentration has been reviewed under the KauCC's curricular processes and is awaiting system approval. The program is actively engaged in examining ways to share specialized courses with other UHCCs to reduce program costs and enhance system program strengths by participating in a UHCC working group to strengthen and maintain an effective 2-yr science degree; reduce costs associated with low-enrolled classes; and maintain or increase the breadth of offerings needed to complete ASNS degree concentrations. The group developed a plan to ensure all UHCC students have access to at least one online section each year of key courses. The program has engaged in grant seeking. Early College offerings have increased.	This program serves to meet the strategic goal towards demand for more STEM graduates under the Hawai'i Graduation Initiative and is part of a consortium of ASNS degrees for the UHCCs. Program enrollment has increased each of the past three years (from 32 to 43) and is one of only two UHCC ASNS programs that has seen increased enrollment. The campus has several current grant projects whose goals are to increase the number of STEM majors and NH STEM majors and graduates by exposing students to science opportunities, building confidence, and enhancing support for increased success. By having multiple science pathways that include Biological Science, Physical Science, and Pre-Engineering housed under one degree the additional consolidations offer the degree program increased viability on a scale feasible within a small island population. Additionally, the Early College program has begun to offer more science courses and this may lead to increased interest in our ASNS degree.

**Leeward Community College
Small Programs**

Leeward CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
Plant Biology and Tropical Agriculture (PBS)	Continuation of program	Program faculty has reviewed the CA and AS and submitted curriculum revisions in fall 2021. The program name also changed to Sustainable Agriculture, which should attract and make clearer the AS degree program.	The Plant Biology & Tropical Agriculture (PBS) Program started in Fall 2014. While there is strong demand from industry partners for the program, the number of majors and graduates have been low, though slowly increasing. From Fall 2017 – Fall 2021, the number of majors increased from 30 – 48.
Television Production (TVPR)	Stop-out and terminate TVPR degree and certificates. LCC will consolidate (10) TVPR courses into larger Digital Media (DMED) program as a video production specialization.	The Television Production Program submitted a comprehensive program review and after a review and discussion by a special advisory committee, a recommendation to the Chancellor was made to consolidate the TVPR courses into the Digital Media (DMED) program.	The Television Production (TVPR) Program has been identified as a program with a small number of graduates for several years due to its three-semester long cohort model. A comprehensive review of the program shows that in addition to the small cohort size, the number of majors continues to decrease. A program review advisory committee was formed which included CTE faculty, staff, and industry representatives. A recommendation to the Chancellor from this committee to stop-out the TVPR degree and certificates and consolidate the TVPR courses into the DMED program.
Business Technology (BTEC)	Continuation of the program	A discussion with the program faculty and advisory board participants in spring 2022 and Fall 2022 to discuss a potential program stop out will be scheduled. The program recently submitted a comprehensive program review and the information presented will be reviewed. A special program review committee may be assembled to review the recent report and determine appropriate recommendations to the Chancellor to consider future directions.	The Business Technology (BTEC) Program has met a specific need for skills training in support positions in an office setting. After a peak in 2011-2012, the number of majors and graduates has been on the decline. A large number of students leave the program after receiving the Certificate of Competence. Additional consideration is needed to Stop-out the BTEC degree and certificates and consolidate BTEC courses into a larger Management (MGT) program.
Integrated Industrial Technology (IIT)	Continuation of program	In spring 2021, program faculty assembled and coordinated a Business Industry Leadership Team (BILT) made up of industry experts that hire technicians in electro-mechanical, mechanical engineering, and manufacturing production. The outcome of this BILT meeting resulted in curriculum revisions in the CA and AS.	The Integrated Industrial Technology (IIT) Program started in Fall 2017. The number of majors has increased from 3 majors in Fall 2017 to 37 majors in Fall 2021. The first graduating class in spring 2020 had 9 AS degree completers.

Leeward CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
Hawaiian Studies	Continuation of program	With the vast majority of Hawaiian Studies courses being delivered online due to COVID-19, greater online recruitment efforts will be directed towards all students in Hawaiian Studies courses, emphasizing that students can earn their AA in Hawaiian Studies while they are pursuing their AA in Liberal Arts.	Despite the decline of majors from 65 to 44 in the period from 2020 to 2021, the number of graduates have steadily increased from a low of 4 in 2019 to 7 in 2020 to 9 in 2021.

**UH Mānoa
Small Programs**

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
College of Arts, Languages, and Letters			
American Studies (BA)	Undergoing program review in Spring 2022. Continuation of program, and monitor enrollments to assess effectiveness of program modifications.	Effective S21, the BA program has modified the degree requirements to facilitate timely progress toward degree completion. We now devote a portion of every department meeting to discuss and plan publicity and outreach, collaborations with the transfer center, etc.	We have successfully recruited a number of new majors in the past semester and have robust enrollment in our required core courses.
Art History (MA)	Undergoing program review in Spring 2022. Continuation of program and expanded recruitment efforts.	Vigorous recruitment over the past year was successful: 6 new MA students began the program in F21. The ideal size for this program is about 5-6 students per year in each of the 3 years, or roughly 18 total. This is the first step toward that goal. Completion rates in this program are very high and we anticipate most if not all will complete the degree.	This is the only Asia/Pacific focused art history graduate program in the country. It is a low-cost, high-value program to the university; most courses are joint grad/undergrad courses at the 400 level, and much graduate training takes place in 699/700 overload courses. MA grads also support the teaching of core undergrad courses ART 175/176, which would be impracticable (given reduced faculty numbers) in the absence of GA support.
Asian Studies (BA)	Undergoing program review in Spring 2022. Continuation of program and expansion of undergraduate recruitment efforts.	Revisions to BA program and to Asian Studies' visibility on STAR, approved in late 2020, were implemented in fall 2021 and may take a year or two to bear fruit. We continue to develop new courses to meet student interest. Department plans to work with CALL Advising Center to identify and implement strategies for recruiting more majors.	The program is instrumental in fulfilling the University's Asia/Pacific focus. Courses attract students from across campus and have robust enrollments with high SSH. Departments from across campus rely on Asian Studies courses for electives. Expressions of interest in major and minor are increasing. The number of majors held steady last year but COVID caused a drop in graduation rates due to students taking LOA or medical leave.
Dance (MA/MFA)	Undergoing program review in Spring 2022. Recommend continuing ongoing efforts to consolidate degrees within Theatre & Dance.	The merger proposal for Theatre and Dance is currently under review. Active graduate recruiting has assisted to increase enrollment. Curricular changes, including four new and well-enrolled dance courses, were made to support the departmental Action Plan to center the Pacific and to strengthen Asian and Pacific course offerings.	A robust curriculum of pertinent and diverse dance offerings draws graduate students in increasing numbers.
History (PhD)	Undergoing program review in Spring 2022. Continuation of program.	Department anticipates three (3) PhD graduates in spring / summer 2022. Six (6) new PhD enrollments in Fall '21 (double the	The only PhD-awarding History program in the state, and the only program nationwide that offers a PhD in Hawaiian and Pacific /

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
		enrollments of the previous year), as well as rising numbers of MA and PhD applicants for Fall 2022 admission (c. 10% increase over last year) suggest continuing need. Internal Graduate Curriculum Review Committee (GCRC) plans revisions to fields and program requirements to increase time to degree.	Oceanic history, supporting UHM's strategic plan. Our PhDs teach across the UH system and the country. Graduate assistants necessary to support World History FGA, FGB, FGC sequence. Graduate seminars and faculty support MA & PhD programs in Asian Studies, Political Sciences, American Studies, and other fields (History faculty serve on the same number of non-History graduate committees, as in History).
Music (PhD)	Undergoing program review in Spring 2022. Continuation of program and monitoring of enrollments and graduation rates to assess effectiveness of program modifications.	Changes within the MA track in Ethnomusicology allows for a more direct path to the PhD program that should ensure faster time to graduation in the PhD program while increasing enrollment.	4 PhD students have graduated in Fiscal year 2021. Recruitment remains steady. Over 50% of upper-divisional course work is shared by all tracks in this degree.
Pacific Islands Studies (BA)	Undergoing program review in Spring 2022. Continuation of program and monitoring of enrollments to assess effectiveness of program modifications and recruitment efforts.	The program was recently modified to ease articulation, and increase flexibility and appeal to potential students. New agreements are in process to establish direct pipelines into the major from the UHCCs. A new Pacific cluster was created in 1 st year program, and cross-listings with IS, ENG, GEOG, Honors are in process. A BAM4+1 pathway was created and the first BAM student piloted program in AY 2021-2022.	The program is an asset to UHM and essential to efforts to be a model indigenous-serving institution and Native Hawaiian place of learning—acknowledging Hawai'i's culture, history, and contemporary status in the Pacific Islands. More than 80% of PACS majors are Native Hawaiian or Pacific Islander heritage students, and about 72% of students who take undergraduate PACS classes are Pacific Islanders, and 38% are Native Hawaiian or Part-Hawaiian. Faculty teach introductory through MA-level courses for efficiency and to attract new majors.
Philosophy (PhD) <i>NEW</i>	Undergoing program review in Spring 2022. Continuation of program. (The current average of 2.8 is very near the target.)	The website was revamped in Fall 2020 and is now being continuously updated. Recruitments are accordingly up: Currently, we have 31 PhD candidates compared to 23 in 2020 and 19 in 2019.	We are the only Philosophy department in the nation to offer a PhD in comparative philosophy with 5 Asian traditions to choose from: Buddhist, Chinese, Indian, Islamic, and Japanese. We have a stellar placement record. PhD completion has been slower during the pandemic due to mental exhaustion. We are extremely confident about the coming years.
Religion (BA)	Undergoing program review in Spring 2022. Merger with Classics was approved March 2022.	Beginning in Spring 2021, the Religion Department began the process of merging with the Classics Program. The result will be a newly consolidated department and combined BA with tracks.	The consolidated department will allow us to run both the Religion and Classics curricula more efficiently, as well as combine our total number of majors. We are also undertaking several measures to reduce barriers to enrolling in Religion courses, and to advertise the Religion BA.

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
Classics, French, German and Spanish (BAs)	Undergoing program review in Spring 2022. Classics merged Religion in March 2022. The French, German and Spanish BAs are in the process of merging into a single degree program.	For Classics information, see Religion. A proposal to consolidate the French, German and Spanish BAs into one new BA (BA in LLEA) is currently under review.	The consolidation of the three BAs will strengthen the curriculum and, as an aggregate, will graduate more than 10 BAs a year.
Dance (BA/BFA) NEW	Undergoing program review in Spring 2022. Recommend continuing ongoing efforts to consolidate degrees within Theatre & Dance.	The merger proposal for Theatre and Dance is currently under review.	One and a half years ago, we changed the requirements of our BA and BFA degree programs, which resulted in increased enrollment despite several of our students being on a Covid-related LOA.
Theatre (BA)	Undergoing program review in Spring 2022. Recommend continuing ongoing efforts to consolidate degrees within Theatre & Dance.	The merger proposal for Theatre and Dance is currently under review.	The number of majors has increased this year. We anticipate that this trend will continue more strongly post-Covid.
Theatre (PhD)	Undergoing program review in Spring 2022. Recommend continuing ongoing efforts to consolidate degrees within Theatre & Dance.	The merger proposal for Theatre and Dance is currently under review and further revision. Our intent is to propose a program modification to reduce and rename existing concentrations with an eye toward recruitment and modernization of terminology in the discipline.	We have had 9 doctoral candidates who graduated in the last three years – one of whom was the first PhD student in the popular Performance Studies concentration. Two more PhD graduations are anticipated in Spring 2022. We currently have 12 PhD students plus 9 applicants so far for Fall 2022. We expect to meet the average graduation rate in the future.
College of Engineering			
Mechanical Engineering (PhD)	Next program review schedule for 2025-2026. Continuation of program.		In light of the increase in student enrollment numbers (up to 24 as of Fall 2021) and the increase in research funding (\$2,302K in 2020). In 2021, we graduated 3 PhD students, and the goal for the College will be to maintain or increase this number over the next several years.
JABSOM			
Medical Technology (BS)	Next accreditation visit is scheduled for 2030. Continuation and monitoring of the program as post-pandemic planning discussions develop.	With the second-degree students now graduating, both the enrollment and graduate numbers have significantly increased. New admissions in Fall 2020 to Spring 2021 has reached 19, more than double of previous years. Continue to do outreach and recruit Medical Lab Technician students from KCC. Continue outreach through DOE Health Academies, student organizations like HOSA and Pre-Med Association, and Girl Scouts of America. Developing more streamlined clinical rotations to facilitate training at clinical	The BS in Medical Technology, though small, contributes to the workforce in a key segment of the economy during a time when health professions are facing unprecedented shortages and challenges. It is important to distinguish that the KCC AS-MLT (Medical Laboratory Technician) is not equivalent to UHM's BS in Medical Technology, whose graduates receive clinical training that qualifies them to take the MLS (Medical Laboratory Scientist) certification exam. In the workplace, their

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
		affiliates. Continue collaboration with the Life Sciences Department of Microbiology to recruit students in the clinical microbiology track.	roles and responsibilities exceed those for MLTs.
Quantitative Health and Clinical Research (MS)	All JABSOM graduate programs will be reviewed in 2022-2023 with an eye toward strengthening and consolidating. Continuation and monitoring of program as post-pandemic planning discussions develop.	The program was modified in 2021 to increase flexibility in specialties and better-prepare students for the current job market in health sciences. We anticipate Enrollment increases, leveraging recruitment efforts with the recently approved Graduate Certificate in Clinical Research Program; increased outreach to advisors; improved recruitment effort to all the UH colleges, departments, and other universities; and updated program website to reflect the recently revamped MS program.	The program has been expanding its curriculum to address emerging topics in clinical research and quantitative health science fields.
Developmental and Reproductive Biology (MS/PhD)	All JABSOM graduate programs will be reviewed in 2022-2023 with an eye toward strengthening and consolidating. Continuation of program.	The Institute for Biogenesis and the Department of Obstetrics and Gynecology faculty now collaborate in this endeavor. DRB has recently recruited students from the UROP and INBRE programs to become graduate students and also markets its program via relevant journals and conferences. The DRB supports five TA positions from the Department of Anatomy, Biochemistry and Physiology (ABP), two IBR/AVS positions sponsored by the Institute of Biogenesis Research (IBR), one Kosasa Assistantship RA position sponsored via relationship with the Department of Obstetrics and Gynecology (Ob-Gyn), and traditional RA positions sponsored by grants of graduate faculty. All DRB students are supported. The DRB program continues to prepare students for medical school admissions via MD-PhD mechanism.	The DRB program is a specialty program and fills an important niche nationwide. It offers a highly specialized curriculum in the field of reproduction and development. The program bridges basic science and clinical applications and prepares students for careers in academia, medical field and biotech and other industry. This includes students who apply to medical school. The DRB student body is multicultural and multiethnic, with 35% of the students being ethnic minorities and first in the family to pursue graduate studies and thus providing a unique and nurturing environment for education for underprivileged students in Hawaii.
Cell and Molecular Biology (MS)	All JABSOM graduate programs will be reviewed in 2022-2023 with an eye toward strengthening and consolidating. Continuation of program.	Successful outcomes of current MS graduates have led to higher application and acceptance rates. We have increased recruiting efforts within the UH system by presenting program descriptions and scientific talks. Students are encouraged to	The program serves a vital role in Hawai'i by providing technical training to serve the Hawai'i research and clinical-based work force. Current enrollment is 11 with each student on a two year plan. We anticipate meeting the current 5 year average (3 degrees/year) in the next two years. In this

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
		complete their Master's before moving to a PhD. We have doubled the number of students accepted into the program without reducing our quality since 2018. Covid-19 has affected the progress of research due to laboratory shut downs, but these problems are only temporary. We anticipate increased graduation rates in the upcoming years.	MS program students can move into the PhD track. When this occurs, students are not required to graduate with an MS degree prior to entering the PhD program.
College of Natural Sciences			
Mathematics (PhD)	Underwent program review in Fall 2021. Continuation of program, and monitoring of enrollments to assess effectiveness of program modifications.	Time-to-degree issues are being addressed. Newly hired faculty with active research programs and grant funding are expected to improve PhD graduation rates.	We expect 5 PhD students to finish by August, 2022, which would elevate the program from the small programs range. The recently improved recruitment/ admissions policies and new qualifying exam schedule will improve graduation rates. A significant number of our students have slowed progress as they struggle with mental health issues due to the pandemic. Thus, it will take longer for our actions for program improvement to make an impact on graduation rates.
Computer Science (PhD)	Underwent program review in Fall 2021. Continuation of program.	The Department is emphasizing inclusion of graduate research assistants in grant proposals and faculty research funding is increasing. We believe that students should be able to enter the PhD program directly with course deficiencies. Recent growth in the popular areas of data science, machine learning, and artificial intelligence are expected to attract more interest in the PhD program.	It is important for the Computer Science program to maintain an active research capability to meet the future needs of the State and to contribute to the field of computer science as an R1 institution. In addition, faculty members will not be competitive for research funding, and the ICS department will not be able to attract nor retain excellent faculty, if the Department does not have a PhD program. Program rankings depend on active research and visibility in the research community. It is imperative that the PhD in Computer Science be maintained and expanded.
Chemistry (MS)	Underwent program review in Fall 2021. Continuation of program, and monitoring of enrollments to assess effectiveness of program modifications.	Program provides courses that meet requirements for other degrees (uses the same courses as the PhD Chemistry program, and courses used for the MS/PhD programs serve as elective courses for the BS Chemistry program). We have been working on improving monitoring of	Chemistry graduate students serve as TAs for 120 sections of Chemistry labs for undergraduate students across the Mānoa campus, generating 2500 SSH/yr. Unfortunately, COVID has impacted our graduation rates with several students needing to delay graduation. New graduate students are also still encountering greater

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
		research progress and anticipate this will have a positive impact on graduation rates.	difficulty in progressing in the department in part due to COVID-associated issues.
Chemistry (PhD)	Underwent program review in Fall 2021. Continuation of the program; monitor the continuing growth in enrollment and graduation.	Program provides courses that meet requirements for other degrees (uses the same courses as the MS Chemistry program, and courses used for the MS/PhD programs serve as elective courses for the BS Chemistry program). We have also recently improved monitoring of research progress through several changes, which appear to be working given the increase in graduation rates.	Chemistry graduate students serve as TAs for 120 sections of Chemistry labs for undergraduate students across the Mānoa campus, generating 2500 SSH/yr. Unfortunately, COVID has impacted our graduation rates with several students needing to delay graduation. New graduate students are also still encountering greater difficulty in progressing in the department in part due to COVID-associated issues.
Botany (BA/BS)	Underwent program review in Fall 2021. Continuation of the program; monitor the continuing growth in enrollment and graduation.	We anticipate continued growth of these majors in the coming years. They provide a valuable resource to the growing conservation community in Hawaii and will continue to be needed.	Presently there are 74 students in the Botany BA and BS degrees. These numbers have been steadily increasing and we have seen greater increases this past year. Graduates with Botany degrees have also increased from an average <4 from 2016-2018 to an average of 7 from 2019-2021. Continued growth of the program is expected in response to the 2019 formation of the School of Life Sciences.
Botany (PhD)	Underwent program review in Fall 2021. Continuation of the program; monitor the continuing growth in enrollment and graduation.	Junior faculty within the Botany Graduate program have been receiving federally funded grants and are now actively recruiting students. As these programs flourish, student graduation rates will rise.	The PhD student numbers have remained consistent over the past six years ranging from 18-21 students. Graduates averaged just under 3.0 for the past three years. Students are moving through their programs consistently, and we anticipate as the newly recruited faculty recruit students, these numbers will continue to rise.
Microbiology (MS/PhD)	Underwent program review in Fall 2021. Continuation of the program; monitor the continuing growth in enrollment and graduation.	The merger of the School of Life Sciences has resulted in new collaborations and will continue to provide the Microbiology graduate programs opportunities to grow.	Growth of these programs was stymied by the pandemic that canceled the recruitment of three faculty positions that were anticipated to bring in new graduate students and help build this program. The faculty have been developing relations with other units and we are actively pursuing programs such as BAM degrees. Active research programs have recruited new students and several have completed degrees this year.
Astronomy (BA)	Underwent program review in Fall 2021.	No action needed at this time. The proposal for permanent status of the degree is being submitted in spring 2022.	The program was approved in 2014, effective Spring 2015. The first cohort began graduating in 2019, with 3 students. Enrollment is now at 15-20. This program is

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/Improvements
	Continuation of the program; monitor the continuing growth in enrollment and graduation.		nearly zero cost, since almost all activities also support BS Astrophysics.
Astrophysics (BS)	Underwent program review in Fall 2021. Continuation of the program; monitor the continuing growth in enrollment and graduation.	No action needed at this time. The proposal for permanent status of the degree is being submitted in spring 2022.	The program was approved in 2014, effective Spring 2015. The first students began graduating in 2017. Enrollment in the program continues to grow each year, with 53 students currently enrolled.
Physics (BA/BS)	Underwent program review in Fall 2021. Continuation of the program; monitor the continuing growth in enrollment and graduation.	The program will continue outreach and recruitment efforts to increase enrollment. Mandatory advising has been effective in decreasing time-to-degree.	Combined enrollment in the BA and BS degrees has been declining, with current enrollment at just under 40 students. Graduating students have remained steady at 9 for the last three years. Much of the decline is due to the establishment of the BA Astronomy & BS Astrophysics degrees, with students now shared among the three programs.
School of Ocean and Earth Science and Technology			
Atmospheric Sciences (BS/ PhD)	Next program review scheduled for 2023-2024. Continuation of program, and monitoring of enrollments to assess recruitment and retention efforts.	With a newly-produced recruitment video, our redesigned website, growing social media presence, and increased outreach to advisors, high school counselors, and the Physics and Math programs, we anticipate a marked uptick in enrollments.	ATMO101 and ATMO200 have seen marked increases in enrollment. With more focused advising and recruitment among these classes we hope to see growth in numbers of majors. This program is in the top 25 such programs in the world and addresses employment demand in meteorology, air quality, and climate sciences that are critically important for the State. ATMO graduates have taken government positions as meteorologists across the Pacific and on the continent. This degree is part of one of the strongest research units in the UH System, and its faculty have won awards for excellence in teaching, research, and community service. The program is known internationally for excellence in Pacific-Asian climate science and tropical meteorology.
Earth Sciences (MGEO)	The program is stopped-out.	Stopped-out	Stopped-out
Geology and Geophysics (BA/BS) NEW	Next program review scheduled for 2023-2024. Continuation of program, and monitoring of enrollments to assess recruitment and retention efforts.	Undergoing curriculum modification based on national review of geology and environmental science enrollment trends, peer and target department changes, and student surveys. Main source of majors,	This program has undertaken a department-wide curriculum revision with the identification of new BA/BS tracks focused on timely disciplines. For the BS, these include environmental science,

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
		100-level classes and labs continue to see surging enrollment.	hydrology, volcano science, tectonophysics, and planetary exploration, and for the BA a new 4+1 program in Earth Science Education has been established with the College of Education; also under consideration are new BA programs in coastal geology, hazards, and geotechnology.
Ocean & Resources Engineering (PhD)	Last ABET accreditation visit was in Fall 2021. Continuation of program, and monitoring of enrollments to assess recruitment and retention efforts.	Only in AY20-21 has ORE filled its full complement of faculty following a series of retirements. The new faculty are infusing the curriculum with new energy, new courses, and supporting growing numbers of students on RA's. Renewed efforts to engage alumni, local engineering firms, co-teaching with COE, and new courses offered at the undergraduate level "Surf Science" should create expansion of the graduate program at all levels.	The ORE PhD is a unique, high-quality program that directly meets state needs and state/national workforce shortages of Ocean Engineers. The MS program has recently seen a surge of new students which has increased their graduate rate and removed the ORE MS from the small programs list. We expect to see this cohort migrate up to the PhD program and increase student graduation rates.
School of Social Work and Public Health			
Epidemiology (PhD)	Next accreditation visit scheduled for 2023. Continuation of program, and monitoring of enrollments to assess recruitment and retention efforts.	Seven candidates are on track to graduate in 2022. We had 7 graduates in 2020-2021 and expected more candidates to graduate, but the ongoing pandemic kept many from focusing on their PhD research and dissertations as they had to continue working on the COVID-19 response at their places of employment. With the increased interest in epidemiology and new faculty hires, we anticipate further increases in enrollment and graduation rates.	CEPH, our accrediting agency increased the minimum number of credits from 30 to 42, which has lengthened time to degree. Nonetheless, the 5-year average of graduates has increased substantially since the temporary stop-out of the program in 2011. This is an area of a high priority for the state of Hawai'i, esp. given the pandemic. As the only PhD Epidemiology degree in Hawai'i and the Pacific Basin, the program meets a critical, high-demand workforce need in our local community. Our graduates and students play key roles in addressing COVID-19 in communities here and throughout the region.
Social Welfare (PhD)	Next program review scheduled for 2023-2024. Continuation of program, and monitoring of enrollments to assess recruitment and retention efforts.	We have increased our recruitment and retention efforts with excellent results. We have the largest cohort of 7 in Fall 2021. Since the stop-out, the program has had a 100% retention rate. Three out of four F2018 cohort students have advanced to candidacy. We anticipate an increase in graduation rates.	Enrollment has been strong and current enrollment (F2021) is 20, increased from 13 (F2020). The number of degrees awarded is below the threshold of 3 because of a stop-out of admissions in 2015 and 2016. Given that this is the only PhD in Social Welfare in the Pacific Basin, the program serves a regional need.

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
College of Social Science			
Geography and Environment (PhD)	Next program review scheduled for 2022-2023. Continuation of program.	Increased recruitment efforts and ability to secure graduate funding through external student and faculty grants. More focused monitoring of student progress to improve time-to-degree.	The number of PhDs granted has shown an upward trend. Program enrollments have significantly increased from 22 in 2013-17 to 29.3 in 2017-21. In 2021-22 our students succeeded in securing external funding (EWC, FLAS, SSRC, Fulbright, NSF), and their time-to-degree has improved. Two PhD candidates graduated in Fall 2021 and a few more will soon graduate in Spring 2021.
Urban and Regional Planning (PhD) <i>NEW</i>	Next program review scheduled for 2022-2023. Continuation of program.	<ul style="list-style-type: none"> ○ Revised the curriculum in 2017 to provide structure and move to a cohort model. ○ Revised guidelines to offer the ‘three papers’ dissertation alternative. ○ Initiated a PhD Forum to assess progress each semester and provide feedback. ○ Developed a progress report to be completed each academic year in addition to regular meetings with the advisor. 	Increased interest from and admission of students with master’s degrees in fields other than urban planning in the last couple of years (e.g., environmental design / architecture, marine resource management, geology and geophysics, geography, economics, Hawaiian studies)
College of Tropical Agriculture and Human Resources			
Biological Engineering (BS)	Last ABET accreditation visit was in Fall 2021. Continuation of program and expanded recruitment efforts.	The program pursued and finalized an MOU with the College of Engineering (CoE) to ensure the program has enhanced visibility and to collaborate on recruitment efforts. Program faculty have increased their interaction with Hawaii high schools STEM academies in capacities ranging from giving presentations to serving on an advisory board to promote the program.	This is the only biology-based engineering program in the State of Hawaii that is accredited by the EAC-ABET and produces graduates able to meet critical needs for the State in areas such as biomanufacturing of novel bio-products, ensuring food/energy security, and solving environmental issues. CTAHR and CoE combined recruitment efforts are expected to significantly improve the visibility of the program to prospective engineering students. Recruitment and instructional partnerships with the intradepartmental MBB program will be expanded.
Tropical Agriculture and the Environment (BS)	Next program review scheduled for 2022-2023. Continuation of program.	PEPS and TPSS merged two BS programs in 2017. We are seeing a growth in TAE enrollment for the last two semesters (36 in 2017 to 50 in 2021 Fall). The two	TAE is the only under-graduate program on Manoa campus that teaches agricultural crop production along with protecting the

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
		<p>departments have increased outreach to advisors and expanded recruitment efforts to high school teachers. We submitted a revised curriculum that streamlines course selection, contains updated courses and pathways to attract a new generation of students. The two new specializations are geared to better prepare students for the current job market. The two departments are currently revising and updating webpages to increase visibility and attractiveness to prospective students.</p>	<p>environment from invasive species and managing existing pests. TAE addresses employment demand in agrosecurity, biotechnology, crop production, agroecology, environmental conservation, and native Hawaiian plant preservation. This is the 4th year since the initiation of TAE. We have graduated 18 students with an average of 4 to 5-year degree completion time starting from freshman. With current improvements in the curriculum combined with increased outreach efforts, we anticipate a higher graduation rate than the 8/yr. of FY2021.</p>
Nutritional Sciences (MS)	<p>Next program review scheduled for 2022-2023. Continuation of program.</p>	<p>The program has added in the last few years a Dietetics internship MS track which brings in additional student funding and students.</p>	<p>The MS program is an important feeder between the undergraduate degree and the PhD.</p>
Biological Engineering (MS)	<p>Program stopped-out.</p>	<p>Stopped-out</p>	<p>Stopped-out</p>
Food Science (MS)	<p>Next program review scheduled for 2022-2023. Continuation of program.</p>	<p>Currently, we are working with the college to have one new faculty in food science. Enrollment in MS Food Science program has increased over the years (from 4 students in 2015-2016 to 8 students in 2016-2017, 10 in 2017-2018, and 9 in 2018-2019), partly due the establishment of a 3+2 program in collaboration with 4 universities in China. Enrollment in the MS in Food Science is currently 8 students. With the increased discussion on diversifying Hawaii's economy and strengthening food security and our food system, this program is critical to produce competent graduates for the Hawaii food industry.</p>	<p>We will also work with current undergraduate students in CTAHR to recruit to the graduate program in food sciences. Faculty have just started to partner with Native Hawaiian Student Services at UH and with indigenous centers at mainland universities to recruit new students for this program. Faculty are also developing various outreach programs to develop a pipeline to introduce Hawaii students to food science and graduate opportunities in K-12 education. Hiring a new food chemistry faculty is another milestone we are working with the college administration as we only have three regular faculty members in food science in the department. In 2022, we are working on the proposal submission to USDA, Food and Agricultural Sciences National Needs Graduate and Postgraduate Fellowship Grants Program (NNF), which is designated for graduate degree (masters and doctoral) programs and postgraduate training of the next generation of policy makers, researchers, and educators in the food and agricultural</p>

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
			sciences. We expect that this connection to the USDA will attract new students to this program.
Entomology (MS/PhD)	Next program review scheduled for 2022-2023. Continuation of program.	Efforts made to include graduate student support in all grants submitted. Encourage current students to attend meetings where interaction with prospective students can occur as a recruitment tool. Won Entomology Games National Championships at Annual Entomological Society of America meeting in 2021, raising the profile of the UH Entomology Graduate Program and stimulating lots of interest in the program.	New State of Hawaii multi-agency effort with support from the state legislature in mosquito control (public health and conservation issues) will provide impetus for greater enrollment in the program. Due to its ag-related economy sector and density of endangered insect populations, Hawai'i has urgent needs for qualified local entomologists. Currently, the program has a number of students working on native and invasive species in Hawaii.
Tropical Plant & Soil Sciences (PhD)	Next program review scheduled for 2022-2023. Continuation of program.	TPSS graduate faculty have increased acquisition of extramural awards to support a growing PhD student cohort. The TPSS graduate committee has modified the PhD to more clearly articulate program requirements, Proposal/defense procedures, etc. The modified program is under review at the CTAHR Faculty Senate.	The program has tripled in number of students from 4 in the Fall 2018 semester to 12 in the Fall 2021 semester. Graduate faculty have increased their extramural awards and the recent acquisition of a \$5M NSF EpScor grant to the department will be instrumental in increasing
Tropical Plant Pathology (PhD)	Next program review scheduled for 2022-2023. Continuation of program.	<ol style="list-style-type: none"> 1. Faculty in TrPP are actively recruiting Ph.D. students, with a 3-fold increase in the last 5 years (from 4 to 12 in 2022 SP). 2. Recent rise in extramural fund by multiple faculty, allow increase offering of graduate assistantships. 3. We increase TrPP Graduate Student Travel award to encourage our students to attend national society meetings to increase exposure of our program. 4. We work with American Phytopathological Society (APS) to recruit minority undergraduate students from UHM to register for APS 2021 Plant Health online conference for free. This has increased our UG student interest in Plant Pathology. 5. Current effort in increasing Ph.D. student enrollment (3-fold increase in the last 5 years) required time to see an increase in Ph.D. student graduation (average of 3 to 5 years for degree completion). 	The program is at a right-sized for state needs and the resources directed by the university to the program. The program size fluctuates as a mix of MS and PhD graduates are needed in the greater community. Any agricultural endeavor in Hawaii will encounter pests. TRPP is at the front line of Agrosecurity. Our Ph.D. program provides a strong support of our research team. Recent outbreak of epidemic plant diseases in Hawaii increasing the urgent need of workforce with plant pathology training.
Nutritional Sciences (PhD)	Next program review scheduled for 2022-2023. Continuation of program.	Administratively the program has migrated from NTRI to NUTR in the last few years. At this time there are 9 students still under the	The program has exceeded enrollment expectations since 2018 with 14 students,

UH Mānoa Small Program	Recommendation	Actions Taken	Comments/ Improvements
		NTRI designation and 14 under NUTR. It is one program so together, now, there are 23 students. The program added research active faculty and tracks representing our feeding departmental programs of food science, animal science and human nutrition.	2019 with 19 students, 2020 with 21 students and the current 23 students.
Natural Res & Environment Mgt (PhD)	Next program review scheduled for 2022-2023. Continuation of program and monitor enrollment and graduation.	Newly tenured faculty with active research programs and grant funding are expected to improve PhD graduation rates. We are currently focused on bolstering our instructional programs and NREM PhD students are essential to the popular NREM undergraduate instructional and research programs. The PhD student numbers remained steady for the last 5 years (2-3 started each year since AY18) even as eligible graduate faculty numbers have been steadily decreasing.	It is important for the NREM program to maintain an active research training program to meet the future needs of the State and to contribute to the fields of conservation and natural resources management as an R1 institution. This field of study was, in fact, identified early in the pandemic as a current and future need/growth area for UHM and the state. Without a PhD program, faculty members will not be competitive for research funding and the department will not be able to recruit and retain excellent faculty. The NREM graduate program (MS, PhD, and MEM) overall is robust (2nd highest in CTAHR).

**UH Maui College
Small Programs**

UH Maui Small Program	Recommendation	Actions Taken	Comments/Improvements
Engineering Tech (BAS)	Termination of BAS program	The Engineering Technology program is being terminated effective Fall 2021	
Sustainable Science Management	Continuation of the program	The current program numbers are not sustainable, nor are they expected to be indicative of the future. But the issue also brings focus to a requirement to bring in more students than currently exist. While the problem is mitigated somewhat by the relatively minor budget deficit between general funding expenditures and tuition revenues, in balance the program does not meet even its strongest advocates' expectations. Thus the 2021 SSM Program Review spends a great deal of its reporting on marketing initiatives aimed at bringing in more students. Notably, there are both direct and indirect measures which increase community awareness to spark local student motivation. Overall they include: strengthening relations with Maui high schools, engaging local civic groups for awareness, marketing to potential transfer students across UH, increasing online class opportunities, reviewing course scheduling, exploring mergers with other UHMC programs which could have a sustainability orientation (AG, ET, ASNS, Construction Tech and others). SSM faculty is also deeply engaged in the development of a unique community sustainability center, now known as the Hulihia, now underway with partner Kamehameha Schools.	Initially, sustainability was deemed important enough by the UH System to establish the SSM program, and fully embraced by pretty much all governments as critical. But as determined in the audit of the Hawaii 2050 plan, its lack of progress appears due to the lack of expertise to push the goals forward. This has repeated in more recent statewide initiatives, including by the UH Board of Regents. At the same time, the job demand as determined by the State Labor standards has recently exponentially increased the expected employment demand for sustainability expertise. This is in recognition that jobs do not need to be labeled as 'Sustainability' [Manager, Office, Coordinator, etc.] to benefit from and even require the generic skill sets of efficiency, broad/systems thinking, critical analysis, impact projection, and more which are embedded in SSM and other credible sustainability programs. This remains a growing field and is expected to remain so for a long time to come.
Cultural & Natural Resource Mgt (ATS)	Continuation of option		This program is an ATS and is not considered a standing program.
Auto Body Repair & Painting (AAS)	Continuation of program	With the high demand for ABRP employees the program coordinator has been working with members of The Autobody Association of Hawaii to help find a teacher for the program.	This Program is in high demand by Auto Body Shops on Maui. It is predicted that the ABRP Program will recover with a teacher to instruct students.
Fashion Technology (AAS)	Termination of AAS program	The AAS in Fashion Technology will be terminated at the end of the Spring 2022 semester. An ASC in Fashion Technology	

UH Maui Small Program	Recommendation	Actions Taken	Comments/Improvements
Agriculture	Continuation of program	<p>will be established under the Liberal Arts degree.</p> <p>Agriculture is an important piece of the future "kama'aina economy" and an area recognized by both UH and the State as a part of the overall local economy that needs to grow. Maui County has no other college program in AG unlike Oahu and Hawaii island. Demand for Workers is high. Mahi Pono for example is a large entity on Maui that will be expanding. We also train entrepreneurs in farming and landscaping which builds the overall economy. Professionals in the field come and take individual courses for skills upgrades. Some of our courses are Natural Science or Hawaii focused courses so provide alternatives for non-majors. Bring in USDA grant money to campus - (approx. \$100,000 per year with approx. \$22,000 per year in indirect support; pay for between 5-12 TE per year in lecturer funds - tuition captured by the campus.) Earn supply money for revolving funds with plant and vegetable sales. G-funds have not been used to support AG supply needs for over 25 years. (minimum of \$10,000/year) These sales bring the public onto campus every year.</p>	<p>1) Partner with GoFarmHawaii - aids in recruitment, expertise, and allows us to do Sustainable Agriculture Production every year. Grant funds from GoFarm pay for an APT Farm Coach. 2) USDA ANNH Consortium 2021-23 grant proposal is "Hawaii One AG" which will focus on evaluating curriculum and articulation across the system, developing a cross system introductory course for all campuses, workforce skill training, cross campus experiences for students, Mānoa summer bridge, and making professional recruitment materials (video, social media) for UH Ag programs. 3) Exploring articulation or shared coursework with SSM program and non-credit Maui Food Innovation Program 4) Applying for Sustainability designations for courses to attract students 5) stipends from UH grant for students to help pay for tuition 6) plan to offer grant-paid lecturer classes as tuition waiver in future 7) more aggressive social media campaigns for individual courses as well as program.</p>
Creative Media (AS)	Continuation of program	<p>Program will continue to engage in high school and community outreach, and seek to establish a new path in response to demand in Animation.</p>	<p>The program has grown, and the need is certain as evidenced in our 78% rise in SSH from 462 to 825 and our 48% decrease in cost per SSH from \$187 to \$97. Similar programs at UH Mānoa and UHWO are the fastest growing programs on their respective campuses, and I sense the same will soon be said of ours.</p>
Construction Technology (AAS)	Continuation of program	<p>Budget requests for a second CTEC faculty are expected to be filled by Fall 2022. The primary focus of the new hire will be to build more robust relationships with DOE and other partners than was possible, with the workload of a single faculty for the last 8 years. Over the last two years, many students have reprioritized their educational goals towards gaining short term certificates that</p>	<p>Industry demand for CTEC graduates remains strong. While program enrollments have lagged due to continuing pandemic related obstacles associated with in-person classes, it is expected that as vaccine mandates and testing will become more accepted, and students become more comfortable with post-pandemic in-person learning settings, enrollments will rise.</p>

UH Maui Small Program	Recommendation	Actions Taken	Comments/ Improvements
		<p>enable them to quickly gain employment, often sacrificing the opportunity to continue beyond their initial Certificate of Competence (CO) or Certificate of Achievement (CA). Program faculty and counselors are refining their efforts towards the retention of these students.</p> <p>The STAR student system has been behind (since Fall 2020) in defining specific pathways for the three concentrations in the CTEC program, often contributing to the confusion and consternation of students and their counselors trying to plan their education. As such, many of the classes students should be taking show up as "Not in Plan" and must be reassigned or substituted in their plan by their counselor, most often when the course has already been completed which does not allow for planning. The program coordinator has completed all of the requirements for the system to update STAR and the site is expected to be updated before the end of the Spring 2022 semester.</p>	<p>The CTEC Program is an integral component of the rebuilding of Hawai'i's, and more importantly Maui Nui's post-pandemic economy. The program provides highly skilled building, construction and facilities management to local candidates to fill the void for both local employers and our students that wish to advance their career without leaving the island of Maui or joining a labor union to do so.</p>
Early Childhood Education (AS)	Continuation of program	<p>Only UHCC ECED program with external accreditation-NAEYC. Other CCs are using us as a model and receiving support from UHMC faculty. State of Hawaii offers few avenues to reach preschool teacher qualified and most common is AS in ECED. More need in Maui ECE community for teachers than we can currently provide. Coordinates UHMC Head Start with campus for use by students in ECED, Allied Health and PSY.</p>	<p>Access to early education and child care impacts most other sectors in our community. Most licensed programs in Maui County do not have enough qualified teachers to accept as many children in their programs as they are licensed for. Earning an AS in ECED is the most common pathway to qualify for Lead Teacher in the State of Hawai'i.</p>
Human Services (AS)	Continuation of program	<p>We have identified two major areas of need in our community's recovery from the Covid-19 pandemic: Community Health Workers (CHW) and Substance Abuse (Substance Use Disorder/SUD) Counselors. We partnered with the Hui No Ke Ola Pono on a grant that will fund tuition for these two certificates starting in summer 2022, and with Leeward CC on a second SUD grant that will allow us to refer students to LCC during our "off" years. Past grants that have supported</p>	<p>ARPD Workforce Analytics continues to show strong and growing demand, with a combined average growth of >35% for these fields and both Certificate and Associate's degree graduates earning above the ALICE living wage. We are the only HSER Associate's program in the UHCC system, and offer the breadth of specialization certificates and electives needed in our community.</p>

UH Maui Small Program	Recommendation	Actions Taken	Comments/Improvements
		<p>tuition have resulted in increased enrollment and completions, and we expect this funding to increase our numbers accordingly. We have also partnered with Hale Makua to expand training opportunities on two fronts: CHW training for Maui High students (pilot of online modules and prior learning assessment), and an update of our Working with Older Adults course (targeting the growing older adult population and the need to support "Aging in Place").</p>	
<p>Natural Science (AS)</p>	<p>Continuation of program</p>	<p>This program was established as a UHCC system initiative to leverage already existing courses and faculty into a STEM transfer pathway. The program does not incur any additional costs.</p>	<p>As reported in the ARPD, the number of NSCI majors has increased by 12.5% since 2019-20, from 64 to 72 majors. The number of ASNS graduates has increased by 75% since 2019-20, from 8 to 14. Lastly, the number of transfers to 4-year institutions has increased by 100% since 2019-20, from 7 to 14. The number of low-enrolled classes dropped from 12 in 2018-2019 to one in 2020-21. The NSCI program has adjusted to the health crisis by offering more distance education classes, a 120% increase from 2019-20. The NSCI website has been updated to include scholarships pertaining to NSCI majors, testimonies from ASNS graduates who have transferred to UH Mānoa, and links to careers in engineering in Hawai'i which show strong and continuing demand. Starting in January 2021, an aggressive campaign aimed at recruiting high school students into the NSCI program is deployed: emails and flyers are sent to high school counselors and Zoom presentations are available for those who request them. The emails include the availability of scholarships specific to NSCI majors. The same scholarships are available for current NSCI majors in the hope that it will help retention: emails are sent to all NSCI majors, and students identified as pursuing the NSCI program. NSCI program coordinators from UH campuses offering the NSCI program have met and discussed strategies to address low-enrolled classes, and how to</p>

UH Maui Small Program	Recommendation	Actions Taken	Comments/ Improvements
			schedule classes more strategically and cost effectively.

**UH West O'ahu
Small Programs**

UH West O'ahu Small Program	Recommendation	Actions Taken	Comments/ Improvements
None UHWO concentrations are not considered programs.			

**Windward Community College
Small Programs**

Windward CC Small Program	Recommendation	Actions Taken	Comments/ Improvements
Agripharmatech (CA-AGPT)	1. Continuation of program.	1. Updated CA requirements to include other courses already being offered as student-friendly and institutionally cost-effective alternatives. 2. Updated website, publications, and program info to better explain the certificate's utility for 4yr transfer and technical training for industry careers.	Actions to be taken include: 1. Formalize course transfer and articulation with UHM. 2. Consider incorporation of new and emerging fields into the existing AGPT program. 3. Strengthen program marketing internally and externally. 4. 4. Reestablish ECHS Agripharmatech program with partner schools to increase enrollment and graduates.

- The 5-year review of the Agripharmatech program was completed in 2021, and the next review is scheduled for 2026. The program will continue to conduct an annual SWOT analysis as part of the Annual Reports of Program Data and institutional departmental review processes.



UNIVERSITY
of HAWAII
SYSTEM

UNIVERSITY OF HAWAII
BOARD OF REGENTS

'22 APR 27 P4:27

April 20, 2022

MEMORANDUM

TO: Randolph G. Moore
Chair, Board of Regents

Ernest Wilson
Chair, Committee on Academic and Student Affairs
Board of Regents

VIA: David Lassner
President

Handwritten signature of David Lassner in black ink.

FROM: Debora J. Halbert
Vice President for Academic Strategy

Handwritten signature of Debora J. Halbert in black ink.

SUBJECT: REQUEST FOR REVISIONS TO BOARD OF REGENTS POLICY (RP)
5.201 INSTRUCTIONAL PROGRAMS

SPECIFIC ACTION REQUESTED:

It is requested that the Board of Regents approve the revision of RP 5.201 Instructional Programs to reflect the administration's proposed policy changes.

RECOMMENDED EFFECTIVE DATE:

Upon Board of Regents approval.

ADDITIONAL COST:

There are no additional costs associated with this request.

PURPOSE:

RP 5.201 describes procedures for the review and approvals of new provisional programs, the review and approval of moving a provisional program to an established one, and describes the conditions under which termination and stop-out of programs will occur. The process for establishing a new program is time intensive, often taking well

over a year to go from the authorization to plan (ATP) stage to a Board-approved provisional program.

In an effort to streamline approval of new minors, concentrations, and certificates, changes are needed to both EP 5.201 and RP 5.201. The intent of the policy revisions is to provide clarity around delegation of approval to the President and/or Chancellor/Provost for these types of enhancements to existing board-approved programs that do not require significant resources.

BACKGROUND:

Executive Policy EP 2.201, Section III.C., states that Regents policies shall be reviewed every three years and amended policies may be drafted, vetted and adopted at any time as may be needed. RP 5.201 was last amended on January 28, 2016. The proposed policy revisions attached have been prepared in consultation with the UH Officers, Chancellors/Provost, Council of Chief Academic Officers, Council of Senior Student Affairs Officers, Faculty Senates, UH Student Caucus and the University of Hawai'i Professional Assembly. They have also been reviewed by the Office of General Counsel.

Offering a wide range of degrees at the Associates, Bachelors, Masters, and Doctoral level is fundamental to the operation of the University System. However, curricular innovation and interdisciplinary options do not fit easily within the conventional program approval process, and there has been an expressed need to develop a more flexible and responsive process. The revisions suggested for RP 5.201 are intended to facilitate such responsiveness.

The proposed revisions to RP 5.201 are designed with several goals in mind:

- To make the program proposal and approval process less lengthy and formalistic for programs that do not require significant resources.
- To help create a more flexible and responsive process for programs not requiring significant resources.
- To provide additional management of certificates that can proliferate without adequate oversight.
- To increase the provisional status time for programs of shorter duration (like certificates) so that they can adequately collect data on the success of their programs.

The intent is to delegate approval for degrees not requiring significant resources and/or programs smaller than an associate, bachelor, or graduate degree to the President or campus. The policy now includes two new and critical definitions:

Significant resources: Includes one or more of the following—new faculty or staff positions, new facilities including lab or office space, and/or new operating costs beyond those that can be reallocated from other units in the college, department, division, or school.

Stand-alone: A minor or certificate program that is not housed under an existing major or degree program. These could include interdisciplinary minors or minors in an area of study where the corresponding major cannot be supported.

The following program approval will be delegated to the president or the president's designee if creation does not require significant resources:

1. New minors, concentrations, or certificates consisting of courses solely within or among board-approved, authorized instructional programs.
2. An established program which desires to change to or add a new type of degree (e.g., BA to BS, AS in xx to AS in zz) with minimal change to degree requirements may be approved by the president.
3. A stand-alone minor where the existing board-approved major is being terminated.
4. A stand-alone certificate or minor where the existing board-approved associate degree or certificate of achievement is being terminated.
5. New stand-alone certificates of competence, or academic subject certificates.

While the Board of Regents (BOR) retains approval over all new instructional programs granting academic credit leading to a degree or credential and approval for all instructional programs requiring significant resources as defined in RP 5. 201, EP 5.201 will further delegate program approval as provided in the chart below. The BOR will continue to be notified annually of the full scope of new program actions, and the Master List of Courses Offered will continue to reflect all changes to the programs that are offered at each campus.

To Vice President for Community Colleges/Vice President for Academic Strategy:	To Campus Chancellor/Provost:
1. All new stand-alone certificates of competence or academic subject certificates. 2. A stand-alone certificate where the existing Board-approved associate degree or certificate of achievement is being terminated.	1. New minors, concentrations or certificates consisting of courses within or among existing Board-approved instructional programs. 2. A stand-alone minor where the existing Board-approved major is being terminated.

ACTION RECOMMENDED:

It is recommended that the Board of Regents approve the revision of RP 5.201 Instructional Programs to reflect the administration's proposed policy changes.

Attachments:

RP 5.201 original
RP 5.201 redline
RP 5.201 clean

c: Kendra Oishi, Executive Administrator and Secretary of the Board of Regents



Regents Policy Chapter 5, Academic Affairs
Regents Policy RP 5.201, Instructional Programs
Effective Date: Apr. 21, 2016

Prior Dates Amended: Oct. 18, 2002; Jan. 13, 1966; Feb. 8, 1973; Oct. 20, 1978; May 21, 1982; March 18, 1983; Nov. 22, 1991; Oct. 31, 2014 (recodified); J

Review Date: August 2018

I. Purpose

To set forth policy on instructional programs that are new, provisional, under review, and on the naming of programs.

II. Definitions

No policy specific or unique definitions apply.

III. Policy

A. New Programs

1. The board shall approve:

a. The establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the president.

b. All new certificates that are the sole credential of an instructional program or require significant resources except for the following:

(1) A Certificate of Achievement in which an associate degree in the program is already board-approved.

(2) Certificates of completion and competence.

2. The president is delegated the authority to approve new certificates consisting of courses within or among board-authorized instructional programs.

3. All new program proposals shall be consistent with the institution's mission.

B. Provisional Programs

1. New programs, once approved, shall be considered provisional during the period of their first full cycle, defined as 150% of the proposed length of the degree for baccalaureate and graduate degrees (e.g., 6 years for bachelor degrees, 3 years for master's degrees, and 5 years for doctoral degrees) and 200% for certificates and associate degrees (e.g., 2 years for certificates, 4 years for associate degrees).
2. Each provisional program shall be reviewed at the end of its first full cycle. The request to the board for "established" program status shall be submitted in the academic year following the end of the program's first full cycle. Campuses may request and the president or designee may grant an extension for one year for provisional programs. Additional extensions may be requested.
3. The recommendation by the president for approval by the board shall include the results of a program review. Following its review, the board shall determine whether the program is to be awarded established status or terminated.
4. All provisional programs that have not applied for established status or extension in the year following the completion of the first cycle may be recommended for termination by the president.
5. In confirmation and clarification of existing practice and policy, no tenure appointments or tenure commitments shall be made in the programs during this provisional period.

C. Any significant change to a program once granted established status or deviations from the original intent, purpose, or design of the program shall be approved by the board.

D. The president is responsible for maintaining and making public an official inventory of all approved degrees and certificates of achievement, undergraduate certificates and graduate certificates.

E. Review of Established Programs

1. Instructional programs are systematically assessed to assure currency, improve teaching and learning, and enhance achievement of student learning outcomes.
2. Each campus shall develop its own program review schedule, subject to the following guidelines:
 - a. All established programs at the University of Hawaii at Manoa, the University of Hawaii at Hilo, and the University of Hawaii West Oahu shall receive a

comprehensive review at a minimum of every seventh year unless otherwise stipulated by the board.

- b. Established programs at the community colleges shall receive a comprehensive review at a minimum of every fifth year unless otherwise stipulated by the board.
- c. Should it be determined that a program has undergone significant changes since its establishment, a shorter review cycle may be invoked. In such cases, the program shall be subject to a comprehensive review.
- d. Reviews of particular programs may be undertaken at any time as deemed necessary by the faculty, administration, or board.
- e. A program with a low number of degree/certificates of achievement conferred will undergo a campus level review.

3. A report will be provided to the Board annually on programs with a low number of degrees/certificates of achievement, and on program reviews conducted in the last year, in accordance with professional and regional (WASC) accreditation standards.

F. Termination of Programs

1. Provisional and established programs deemed out-of-date or nonproductive based on a program review or other internal assessments may be terminated by the president.
2. Commitments to students already officially enrolled in such programs shall be met and limited for up to two years for associate degrees at community college programs and four years for baccalaureate degrees. No new program admissions shall take place.
3. The board shall be provided an annual report on all programs terminated.

G. Naming of Programs (Cross reference RP 11.204)

1. Programs are given a name at the time they are approved by the board. Thereafter, the president may approve changes in the functional names of academic programs and credentials as may become necessary to remain current with the terminology and focus of their fields and which involve no significant change in the program requirements.
2. No program shall be given a name to honor a person without approval of the board.

IV. Delegation of Authority

The president is delegated the authority to approve new certificates consisting of courses within or among board-authorized instructional programs. See RP 5.201A.2.



Regents Policy Chapter 5, Academic Affairs
Regents Policy RP 5.201, Instructional Programs
Effective Date: ~~Apr. 21, 2016~~ XXX XX, 2022

Prior Dates Amended: Oct. 18, 2002; Jan. 13, 1966; Feb. 8, 1973; Oct. 20, 1978; May 21, 1982; March 18, 1983; Nov. 22, 1991; Oct. 31, 2014 (recodified); Jan. 28, 2016;
April 21, 2016

Review Date: ~~August 2018~~ XXX XX, 2025

I. Purpose

To set forth policy on instructional programs that are new, provisional, under review, and on the naming of programs.

II. Definitions

~~No policy specific or unique definitions apply.~~ Significant resources: Includes one or more of the following—new faculty or staff positions, new facilities including lab or office space, and/or new operating costs beyond those that can be reallocated from other units in the college, department, division, or school.

Stand-alone: A minor or certificate program that is not housed under an existing major or degree program. These could include interdisciplinary minors or minors in an area of study where the corresponding major cannot be supported.

III. Policy

A. New Programs

1. The board shall approve:

a. The establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the president, except as set forth herein.

~~2.b. The president or the president's designee may approve the following as long as significant resources are not required. All new certificates that are the sole credential of an instructional program or require significant resources except for the following:~~

a. New minors, concentrations, or certificates consisting of courses solely within or among board-approved, authorized instructional programs.

b. New or changed type of degree (e.g., BA to BS, AS in xx to AS in zz) within board-approved, established program(s) with minimal change to degree requirements.

~~(1) A Certificate of Achievement in which an associate degree in the program is already board-approved.~~

~~(2) Certificates of completion and competence.~~

c. A stand-alone minor where the existing board-approved major is being terminated.

d. A stand-alone certificate or minor where the existing board-approved associate degree or certificate of achievement is being terminated.

e. New stand-alone certificates, certificates of competence, or academic subject certificates.

~~2. The president is delegated the authority to approve new certificates consisting of courses within or among board-authorized instructional programs.~~

3. All new program proposals shall be consistent with the institution's mission and principles as described in RP 4.201, RP 4.202, and RP 4.203. Aligning proposals with existing board policy will help to ensure appropriate placement of programs, reduction of duplication, and increased curricular pathways across the system. The proposals should include evidence of demand and the resource requirements and implications to better focus overall resource use and allocation within the proposing academic unit.

4. The instructional program approved by the board shall include the program name, which shall be the Official Program Name, and degree type.

B. Provisional Programs

1. New programs, once approved, shall be considered provisional during the period of their first full cycle, defined as 150% of the proposed length of the degree for baccalaureate and graduate degrees (e.g., 6 years for ~~baccalaureate~~bachelor degrees, 3 years for master's degrees, and 5 years for doctoral degrees) and up to 300% ~~200%~~ for certificates and associate degrees (e.g., 3-2-years for certificates, 6-4-years for associate degrees).

2. Each provisional program shall be reviewed at the end of its first full cycle. The request to the board for "established" program status shall be submitted in the

academic year following the end of the program's first full cycle. Campuses may request and the president or designee may grant an extension for one year for provisional programs. After the one-year extension, the program should be approved for established status or terminated. Additional extensions may be requested.

3. The recommendation by the president for approval by the board shall include the results of a program review. Following its review, the board shall determine whether the program is to be awarded established status or terminated.

4. All provisional programs that have not applied for established status or extension in the year following the completion of the first cycle will may be recommended for termination by the president after all current students have exited the program either through graduation, attrition, or transfer.

5. In confirmation and clarification of existing practice and policy, no tenure appointments ~~or tenure commitments~~ shall be made in the programs during this provisional period.

C. Any significant change to the intent, purpose, design, or structure of a program once granted established status ~~or deviations from the original intent, purpose, or design of the program~~ shall be approved by the board.

D. The president is responsible for maintaining and making public an official inventory of all approved degrees and certificates of achievement, undergraduate certificates and graduate certificates.

E. Review of Established Programs

1. Instructional programs are systematically assessed to assure currency, improve teaching and learning, and enhance achievement of student learning outcomes.

2. Each campus shall develop its own program review schedule, subject to the following guidelines:

a. All established programs at the University of Hawai'i at Māanoa, the University of Hawai'i at Hilo, and the University of Hawai'i West O'ahu shall receive a comprehensive review at a minimum of every seventh year unless otherwise stipulated by the board.

b. Established programs at the community colleges shall receive a comprehensive review at a minimum of every fifth year unless otherwise stipulated by the board.

c. Should it be determined that a program has undergone significant changes since its establishment, a shorter review cycle may be invoked. In such cases, the program shall be subject to a comprehensive review.

d. Reviews of particular programs may be undertaken at any time as deemed necessary by the faculty, administration, or board.

e. A program with a low number of degree/certificates of achievement conferred will undergo a campus level review.

3. A report will be provided to the bBoard annually on programs with a low number of degrees/certificates of achievement, and on program reviews conducted in the last year, in accordance with professional and regional (WASC) accreditation standards.

F. Termination of Programs

1. Provisional and established programs deemed out-of-date or nonproductive based on a program review or other internal assessments may be terminated by the president.

2. Commitments to students already officially enrolled in such programs shall be met and limited for up to two years for associate degrees at community college programs and four years for baccalaureate degrees. No new program admissions shall take place.

3. The board shall be provided an annual report on all programs terminated.

G. Naming of Programs (Cross reference RP 11.204)

1. Programs are given a name at the time they are approved by the board, which is the Official Program Name. Thereafter, the president may approve changes ~~in the functional names of academic programs and credentials~~ as may become necessary to remain current with the terminology and focus of their fields and which involve no substantial ~~significant~~ change in the program requirements.

2. No program shall be given a name to honor a person without approval of the board.

IV. Delegation of Authority

The president is delegated the authority to approve new certificates consisting of courses within or among board-authorized instructional programs. See RP 5.201_A.2.

Provisional and established programs deemed out-of-date or nonproductive based on a program review or other internal assessments may be terminated by the president. See RP 5.201 F.1.

V. Contact Information

Office of the Vice President for Academic ~~Strategy Affairs~~, (808) 956-~~68977075~~,
~~ovpas@hawaii.edu~~~~risad@hawaii.edu~~

VI. References

- A. <http://www.hawaii.edu/offices/bor/>
- B. <http://www.acswasc.org>
- C. RP 11.204

Approved

Approved as to Form:

~~Kendra Oishi~~~~Cynthia Quinn~~
Executive Administrator and
Secretary of the Board of Regents

~~04/21/2016~~

Date



Regents Policy Chapter 5, Academic Affairs
Regents Policy RP 5.201, Instructional Programs
Effective Date: XXX XX, 2022

Prior Dates Amended: Oct. 18, 2002; Jan. 13, 1966; Feb. 8, 1973; Oct. 20, 1978; May 21, 1982; March 18, 1983; Nov. 22, 1991; Oct. 31, 2014 (recodified); Jan. 28, 2016; April 21, 2016

Review Date: XXX XX, 2025

I. Purpose

To set forth policy on instructional programs that are new, provisional, under review, and on the naming of programs.

II. Definitions

Significant resources: Includes one or more of the following—new faculty or staff positions, new facilities including lab or office space, and/or new operating costs beyond those that can be reallocated from other units in the college, department, division, or school.

Stand-alone: A minor or certificate program that is not housed under an existing major or degree program. These could include interdisciplinary minors or minors in an area of study where the corresponding major cannot be supported.

III. Policy

A. New Programs

1. The board shall approve:

a. The establishment of all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the president, except as set forth herein.

2. The president or the president's designee may approve the following as long as significant resources are not required:

a. New minors, concentrations, or certificates consisting of courses solely within or among board-approved, authorized instructional programs.

b. New or changed type of degree (e.g., BA to BS, AS in xx to AS in zz) within board-approved, established program(s) with minimal change to degree requirements.

c. A stand-alone minor where the existing board-approved major is being terminated.

d. A stand-alone certificate or minor where the existing board-approved associate degree or certificate of achievement is being terminated.

e. New stand-alone certificates, certificates of competence, or academic subject certificates.

3. All new program proposals shall be consistent with the institution's mission and principles as described in RP 4.201, RP 4.202, and RP 4.203. Aligning proposals with existing board policy will help to ensure appropriate placement of programs, reduction of duplication, and increased curricular pathways across the system. The proposals should include evidence of demand and the resource requirements and implications to better focus overall resource use and allocation within the proposing academic unit.

4. The instructional program approved by the board shall include the program name, which shall be the Official Program Name, and degree type.

B. Provisional Programs

1. New programs, once approved, shall be considered provisional during the period of their first full cycle, defined as 150% of the proposed length of the degree for baccalaureate and graduate degrees (e.g., 6 years for baccalaureate degrees, 3 years for master's degrees, and 5 years for doctoral degrees) and up to 300% for certificates and associate degrees (e.g., 3 years for certificates, 6 years for associate degrees).

2. Each provisional program shall be reviewed at the end of its first full cycle. The request to the board for "established" program status shall be submitted in the academic year following the end of the program's first full cycle. Campuses may request and the president or designee may grant an extension for one year for provisional programs. After the one-year extension, the program should be approved for established status or terminated.

3. The recommendation by the president for approval by the board shall include the results of a program review. Following its review, the board shall determine whether the program is to be awarded established status or terminated.

4. All provisional programs that have not applied for established status or extension in the year following the completion of the first cycle will be recommended for termination by the president after all current students have exited the program either through graduation, attrition, or transfer.

5. In confirmation and clarification of existing practice and policy, no tenure appointments shall be made in the programs during this provisional period.

C. Any significant change to the intent, purpose, design, or structure of a program once granted established status shall be approved by the board.

D. The president is responsible for maintaining and making public an official inventory of all approved degrees and certificates of achievement, undergraduate certificates and graduate certificates.

E. Review of Established Programs

1. Instructional programs are systematically assessed to assure currency, improve teaching and learning, and enhance achievement of student learning outcomes.

2. Each campus shall develop its own program review schedule, subject to the following guidelines:

a. All established programs at the University of Hawai'i at Mānoa, the University of Hawai'i at Hilo, and the University of Hawai'i West O'ahu shall receive a comprehensive review at a minimum of every seventh year unless otherwise stipulated by the board.

b. Established programs at the community colleges shall receive a comprehensive review at a minimum of every fifth year unless otherwise stipulated by the board.

c. Should it be determined that a program has undergone significant changes since its establishment, a shorter review cycle may be invoked. In such cases, the program shall be subject to a comprehensive review.

d. Reviews of particular programs may be undertaken at any time as deemed necessary by the faculty, administration, or board.

e. A program with a low number of degree/certificates of achievement conferred will undergo a campus level review.

3. A report will be provided to the board annually on programs with a low number of degrees/certificates of achievement, and on program reviews conducted in the last year, in accordance with professional and regional (WASC) accreditation standards.

F. Termination of Programs

1. Provisional and established programs deemed out-of-date or nonproductive based on a program review or other internal assessments may be terminated by the president.
2. Commitments to students already officially enrolled in such programs shall be met and limited for up to two years for associate degrees at community college programs and four years for baccalaureate degrees. No new program admissions shall take place.
3. The board shall be provided an annual report on all programs terminated.

G. Naming of Programs (Cross reference RP 11.204)

1. Programs are given a name at the time they are approved by the board, which is the Official Program Name. Thereafter, the president may approve changes as may become necessary to remain current with the terminology and focus of their fields and which involve no substantial change in the program requirements.
2. No program shall be given a name to honor a person without approval of the board.

IV. Delegation of Authority

The president is delegated the authority to approve new certificates consisting of courses within or among board-authorized instructional programs. See RP 5.201 A.2.

Provisional and established programs deemed out-of-date or nonproductive based on a program review or other internal assessments may be terminated by the president. See RP 5.201 F.1.

V. Contact Information

Office of the Vice President for Academic Strategy, (808) 956-6897, ovpas@hawaii.edu

VI. References

- A. <http://www.hawaii.edu/offices/bor/>
- B. <http://www.acswasc.org>
- C. RP 11.204

Approved

Approved as to Form:

Kendra Oishi
Executive Administrator and
Secretary of the Board of Regents

Date



Executive Policy EP 5.201, Approval of New Academic Programs and Review of Provisional Academic Programs

Effective Date: ~~August 2020~~xxx 2021

Prior Dates Amended: March 1987, April 1989, May 2014, ~~June 2020~~

Responsible Office: Office of the Vice President for Academic ~~Strategy Planning and Policy~~

Governing Board of Regents Policy RP_5.201

Review Date: January 2025

I. Introduction

This Executive Policy directs implementation of Sections III. A, B, and E of the Board of Regents Policy RP 5.201. The following objectives, policies, and guidelines provide for the monitoring of academic program planning intentions, new academic program proposals, and the evaluation of provisional academic programs of the University of Hawai'i.

Chancellors/~~Provost~~ will develop procedures to implement this policy.

II. Objectives

The objectives of the executive policy are:

- A. To establish guidelines and procedures for the preparation and processing of authorizations to plan, proposals for new academic programs, and reviews of provisional programs.
- B. To assure the administration and Board of Regents of the academic and fiscal soundness of proposed and provisional programs and their appropriateness to both University-wide and campus missions.
- ~~C.~~ C. To assure the administration and the Board of Regents that provisions for adequate physical facilities for the programs have been included in campus long-range development plans.
- ~~C.D.~~ C.D. ~~To assure the administration and the Board of Regents that program offerings are aligned across the system, duplication is strategic and intentional, and curricular pathways exist.~~
- ~~D.E.~~ D.E. To assure the administration and the Board of Regents that provisions for meaningful assessment of student learning have been included in proposals for new academic programs; and reviews of provisional programs.

III. Definitions

~~A.~~ A. ~~Definitions of all degrees and certificates offered by the University of Hawai'i System are provided in EP 5.205.~~

~~A.B.~~ A.B. ~~New Program~~

~~1-~~ For purposes of Board of Regents approval, an new-academic program is any sequence of courses or instructional activities required to complete a specific degree, inclusive of required coursework within the major, concentration/specialization, and minor.

- ~~a.~~ a. ~~Culminating in a Board of Regents conferred degree or credential;~~
- ~~b.~~ b. ~~Requiring a major commitment of general-funded resources to a new instructional area. A new program shall be considered as requiring a major commitment if:~~
 - ~~(1) it requires inclusion of a specific request in the Board of Regents' budget for a workload or program change appropriation, or~~



~~(2) it involves a reallocation of resources so extensive that it requires a Board of Regents' action to terminate the program or programs from which the resources are to be drawn.~~

~~B.C.~~ Authorization to Plan (ATP)

~~1.~~ An authorization to plan is a request to authorize planning for a new academic program made to the UH Officers at the beginning of the formal program planning process before resources are committed.

~~C.D.~~ Provisional Program

~~1.~~ New programs shall be considered provisional during the period of their first full cycle. A cycle is 150% of the proposed length for baccalaureate and graduate degrees and up to 300% ~~200%~~ for certificates and associate degrees. At the end of the cycle, provisional programs are eligible to become established.

~~E.D.~~ Established Program

~~1.~~ Are permanent programs that must undergo periodic comprehensive review.

~~E.~~ Academic Subject Certificates

~~1.~~ As defined in EP 5.205, an academic subject certificate is a supplemental credential for students in Associate, Bachelors, or graduate programs of 12 credit hours.

~~F.~~ Academic Minors

~~1.~~ As defined in EP 5.205, an academic minor is recognition of work completed in select credit courses within a specific academic major. Academic minors do not stand alone. Therefore, campuses may recognize academic minors only in Board-authorized baccalaureate degree programs.

~~F.G.~~ Termination

~~1.~~ Programs that are terminated are removed from the official list of degrees and certificates.

~~G.H.~~ Classification of Instructional Programs (CIP)

1. The Classification of Instructional Programs (CIP) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity. CIP was originally developed by the U.S. Department of Education's National Center for Education Statistics (NCES) in 1980, with revisions occurring regularly.

2. Each program CIP code is aligned to the NCES CIP title (when possible) and definition and is used for reporting of programs to the NCES.

3. A CIP code and title generally apply to all levels of certificates and degrees.

~~H.~~ Official Program Name

The name of the program, including parenthetical information, is approved by the Board of Regents at the time of program establishment. It is the official name for purposes of Board of Regents-conferred credentials and is used in University publications.

~~I.~~ Significant Change

A major modification or expansion of the nature of an academic program, including content, objective, or goals.

~~J.~~ Significant Resources

As defined in RP 5.201, significant resources are those that require one or more of the following: new faculty or staff positions, new facilities including lab or office space, and/or new operating costs beyond those that can be reallocated from other units in the college, department, division, or school.



IV. Executive Policy

- A. As described in RP 5.201, the Board shall approve all new instructional programs granting academic credit leading to a degree or credential, upon recommendation by the President with the exception of those in B, C and D below. The President can then delegate approval as outlined in B, C and D.
- B. In addition, the Board shall approve all new certificates that are the sole credential of an instructional program or require significant resources except, for the following: Credentials listed below can be approved by the President or designee if the program does not require significant resources:
- An established program which desires to change to or add a new type of degree (e.g. BA to BS, AS in xx to AS in zz) with minimal change to degree requirements.
- C. Credentials listed below may be delegated to the Vice President for Community Colleges (VPCC) or Vice President for Academic Strategy (VPAS) if the program does not require significant resources:
1. All new stand-alone certificates of competence or academic subject certificates.
 2. A stand-alone certificate where the existing Board-approved associate degree or certificate of achievement is being terminated.
- D. Credentials listed below may be delegated to the Chancellor or Provost if the program does not require significant resources:
1. New minors, concentrations or certificates consisting of courses within or among existing Board-approved instructional programs.
 2. A stand-alone minor where the existing Board-approved major is being terminated.

1. A Certificate of Achievement in which an associate degree in the program is already board-approved.
2. Certificates of completion and competence and campus-based/subject certificates or minors that are components of a Board-approved degree program.

E.C. Program Name/Title

1. The name/title of the program, including parenthetical information, and the Classification of Instructional Property (CIP) code approved by the Board of Regents at the time of program establishment becomes the Official Program Name/title and CIP code for purposes of Board of Regents-conferred credentials and is used in University publications.
2. Program name/titles and CIP codes should align with titles, descriptions and CIP codes for similar programs in the national database and should be consistent across campuses unless the program name is unique to our system or there is a documented reason for the difference. The Office ~~of~~ for the Vice President for Academic Strategy (OVPAS) Programs and Policy (OVPAPP) must approve program name/titles and CIP codes not aligned with the national standard or across the institution. A Master List of Board of Regents-authorized degree and certificate programs, and programs approved by the President or Chancellor/Provost, is maintained by the Office of the Vice President for Academic Strategy Planning and Policy.



3. Requests to change ~~academic~~ Official ~~Program~~ Program Name titles in order to maintain currency in terminology and which involve no substantive change in the program are made to the President. Upon approval, such changes are reported to the Board of Regents as an information item.
4. Official Program Name changes that reflect a substantive program change are handled according to the requirements for new program authorizations as outlined in this policy.
5. Any program name change must be aligned with the correct Classification of Instructional Property (CIP) code and title.
6. No program shall be given a name to honor a person without approval of the Board.

F.D. Authorization To Plan (ATP)

1. The purposes of the ATP are to:
 - a. Coordinate academic program planning actions.
 - b. Request approval from administrators to proceed with planning.
 - c. Inform the administration of long-term academic program planning intentions; the long-term physical facilities requirements of planned programs; and provide opportunities for appropriate feedback.
2. Guidelines for the ATP process are developed by the Office of the Vice President for Academic Strategy Planning and Policy in consultation with the Council of Chief Academic Officers (CCAO). Guidelines for the ATP can be found in Appendix A.
3. ATPs are evaluated by the Officers as to fit with the mission of the Unit, relationship to existing programs on each campus and in the UH system, and reasonableness of the proposed plan. Approval of the proposal authorizes a campus to proceed with planning and developing a formal proposal for the program.
4. After the Officers approve, ATPs are reviewed by CCAO who provide feedback to the proposing campus.
5. Faculty senates will be informed of approved ATPs.

G.E. Proposal for New Academic Programs

1. A program proposal sets forth the description of, and justification for, new academic programs sought by the campuses.
2. The proposal must contain sufficient information to permit assessment of the academic integrity and quality of the program, to determine its fiscal soundness and efficiency relative to other University activities, and to determine its appropriateness to the mission of the University and the campus. See Appendix B for guidelines for preparing the proposal.
3. The proposal must have an appropriate CIP code approved by the QVPA SPP.
4. Procedures and Processing:
 - a. Each Unit establishes internal procedures for the preparation and processing of new program proposals, ensuring appropriate faculty (including faculty senate review where required by internal procedures) and student input and attention to the questions outlined in Appendix B.



- b. Program proposals are reviewed by the ~~Council~~ of Chief Academic Officers (CCAO) for feedback on the content and scope of the proposal, academic integrity, and relationship with programs on each campus and offered by other campuses to ensure program differentiation.
- c. Proposals endorsed by CCAO as ready to move forward for approval are submitted to the President by the campus.
- d. The Office of the President reviews the proposal and (if approved), ~~the program name and CIP code are approved by the OVPAS forwards it to the Board of Regents with a recommendation for approval.~~
- e. ~~The proposal is then sent to the Board of Regents with a recommendation for approval as provisional. Once a proposal is approved as provisional by the Board of Regents, the program name and CIP code is approved by the OVPAPP.~~

H.F. Provisional Programs

1. All programs approved by the Board of Regents are placed on provisional status during their first cycle of operation.
2. No tenure appointments ~~or tenure commitments~~ shall be made in new programs until the Board of Regents has reviewed the provisional cycle and elected to continue the program. Resources for newly approved academic programs are sought in accordance with standard budgetary policies and procedures.
3. Each provisional program shall undergo a comprehensive review at the end of its first full cycle. The review shall examine the program's actual ~~achievement~~ ~~achievement~~ of its proposed enrollment, completion, resource use, impact, and role in the curriculum.
4. A review cycle is 150% of the proposed length of the degree for ~~a~~-baccalaureate and graduate degrees and up to 300% ~~200%~~ for certificates and associate degrees and master's degrees.
 - ~~a.~~—The review cycle schedule will be:
 - ~~a. i.~~—The review is due in 3 ~~2~~ years for a 1-year certificate.
 - ~~b. ii.~~—The review is due in 6 ~~4~~ years for a 2-year associate's degree.
 - ~~c. iii.~~—The review is due in 6 years for a 4-year bachelor's degree.
 - ~~d. iv.~~—The review is due in 6 ~~3~~ years for a 2-year master's degree.
 - ~~e. v.~~—The review period for a Ph.D. shall be 150% of the expected time to completion established on approval of provisional status.
5. Chancellors/Provost establish procedures for the preparation, review, and approval of provisional programs within their uUnits ensuring appropriate faculty and student input.

I.G. Proposal to Establish a Program

1. A proposal to the Board for “established” status of a provisional program shall be submitted in the academic year following the end of the program's first full cycle. The first year of a program is considered the academic year in which students first declare a major in the degree or certificate.
2. The provisional to established proposal is outlined in Appendix C. The proposal to established status should summarize and reflect on the program review, the self-



study of the provisional program, and the quantitative indicators included in Appendix C.

3. The proposal shall be based upon and summarize the comprehensive review of the program.
4. Campuses may request, and the President or designee may grant, an extension for up to two years~~one year~~ for provisional programs. ~~Additional extensions may be requested.~~
5. The provisional to established proposal is brought to CCAO for comment and endorsement.
6. The Chancellor/Provost then transmits the proposal for established status to the President for approval by the Board via an action memo that summarizes:
 - a. A statement of program objectives. Differences between the final program objectives and those found in the program proposal should be explained.
 - b. An assessment of whether or not the program is meeting its objectives and a summary of the evidence used to reach this conclusion.
 - c. A discussion of any substantial changes made in the program since its approval and any substantial discrepancies in program indicators or activities from those identified in the program proposal.
 - d. A projection of resource needs for the next five years.

~~7. An established program which desires to change to a new type of degree (e.g. BA to BS, AS in xx to AS in zz) with minimal change to degree requirements may be approved by the President. However, if such a change requires significant resources or change in the CIP code, a full program proposal must be submitted.~~

J.H. Program Stop-Outs and Terminations-

1. Degree programs may be stopped out by the Chancellor/Provost based on the criteria in item IV.J.4. Degree programs may be terminated by the President based on criteria in item IV.J.5. Termination of all certificates and stand-alone minors may be approved by the Chancellor/Provost.
2. A program stop-out indicates the program is no longer accepting new students. A stopped out program is noted as stopped out, but it is not removed from the UH System official list of degrees and certificates offered.
3. A terminated program is no longer accepting new students, and it is removed from the official list of degrees and certificates. A program scheduled for termination should generally be preceded by a stop-out period that provides time for students currently in the program to graduate.
4. A degree program may be stopped out by the Chancellor/Provost if one of the following criteria applies:
 - a. It is scheduled for termination and requires a period to teach out existing students in the program;
 - b. It is undergoing curriculum redesign with the intention to continue the program after a temporary stop-out;
 - c. It is listed on the Programs with a Small Number of Graduates report for 5 years and stop-out is recommended as a result of a comprehensive program review.



- d. It is determined to be under performing after an external review, and stop-out is recommended by either the department, the Dean, or the campus Chief Academic Officer.
5. A degree program may be terminated by the President if it meets one of the following criteria:
 - a. The program or Dean recommends termination;
 - b. It is listed on the Programs with a Small Number of Graduates report and termination is recommended as the result of a comprehensive program review;
 - c. Recommended for termination by the Chancellor/Provost to the President;
 - d. It is determined to be under performing after an external review and termination is recommended.
- ~~1. A program may be stopped out by the Chancellor if it is:
 - ~~a. Scheduled for termination and requires a period to teach out existing students in the program;~~
 - ~~b. Temporarily stopped out while the curriculum is redesigned;~~
 - ~~c. Appears on the small program list for five (5) years and after a program review.~~~~
- ~~2. A stopped out program is noted as stopped out but is not removed from the official list of degrees and certificates.~~
- ~~3. A program may be terminated by the President if:
 - ~~a. Termination is recommended by the program or;~~
 - ~~b. The program appears on the small program list and if termination is recommended as the result of a program review.~~
 - ~~c. A program scheduled for termination should generally be preceded by a stop out period that provides time for students currently in the program to graduate.~~
 - ~~d. A terminated program is removed from the official list of degrees and certificates.~~
 - ~~e. The Chancellor recommends such action to the President.~~~~

V. Delegation of Authority

The President delegates approval of all certificates and minors described above where a previously Board-approved degree program exists to the Chancellor/Provost.

The President delegates the approval of all stand-alone certificates of competence at the community colleges to the Vice President for Community Colleges and at the 4-year campuses to the Vice President for Academic Strategy.

VI. Contact Information

Office of the Vice President for Academic ~~Strategy Planning and Policy~~, 956-6897,
ovpas@hawaii.edu ~~ovpapp@hawaii.edu~~



VII. References

Approved:

<signature>

<Date>

David Lassner
President

APPENDIX A
AUTHORIZATION TO PLAN

Authorization to Plan (ATP) Guidelines (3-page limit, excluding signature page)

The ATP is a request to plan a new BOR-approved academic program before resources are committed to program planning. The ATP is submitted by the campus Chancellor to the system Vice President for Academic ~~Strategy Planning and Policy~~ (VPA SPP) for review by the UH Officers. The VPA SPP will notify the campus of the results of the review. If positive, the ATP will be reviewed for comment and approval by the Council of Chief Academic Officers (CCAO).

Prior to initiating the ATP, consultation with the campus Vice Chancellor for Academic Affairs (VCAA) must be completed.

The following items are to be addressed in the ATP:

1. Campus, school/college and department/division proposing the new program.
2. Degree proposed and program objectives and potential for articulation across the UH campuses.
3. **Statement of alignment** with the campus and UH system mission, strategic plan and the Integrated Academic and Facilities Plan (IAFP) (https://www.hawaii.edu/offices/aa/IAFP_BOR_Approved_April17.pdf). Provide evidence that demonstrates how the proposed program is consistent with the mission, strategic plan, and IAFP.
4. **Preliminary indicators of need** that include:
 - a. A clear rationale for the new program with as much direct evidence as possible.
 - b. In the case of workforce demand, data and evidence of employment or industry need in the state or local/regional service area of the institution (e.g., occupation projections, current jobs available, critical shortage areas).
 - c. If justification is not tied to employment or industry need, the rationale should include evidence that the proposed program is linked with high priority initiatives of the campus or system.
5. **Preliminary indicators of demand for the program:** Provide evidence of sufficient unmet demand in one or more of the following areas: student demand, demand for services unique to the program, and/or employer demand.
 - a. Provide evidence demonstrating student demand for the program and the extent to which the demand is not being adequately met by existing programs.
 - b. Provide evidence demonstrating demand for services unique to the program (e.g., contracts, consulting, grants, or community service that will be provided).

- c. Provide evidence demonstrating employer demand including any documentation from employers of the need for graduates with specific skills the new program can provide.
6. **Non-duplication of programs** is addressed by listing all programs with the same, or similar, degree level offered at other UH institutions and providing an explanation that differentiates the programs. Provide an analysis that includes:
 - a. Number of degrees conferred over the last three years;
 - b. Why existing programs are not sufficient to address demand;
 - c. If similar programs exist, describe what the proposing institution has done to explore partnerships with the existing program and why an additional program is necessary.
 - d. When a similar program exists, the VCAs of the UH campus(es) with relevant program(s) should be consulted, as should any colleagues in related disciplines from the impacted campus. The ATP should identify who (campus, name and title) has been consulted and the date(s) of consultation.
7. **List potential risks** (e.g., insurance, vendor contracts, off-site management) associated with the new program. These potential risks will be fully assessed in the new program proposal.
8. **Resources: Indicate what resources are needed and where it is anticipated these resources can be acquired.** If new resources will be necessary, please identify where those resources will come from. Indicate how existing resources will be allocated.
9. Impact on accreditation, where relevant (program and regional)
10. Proposed timeline for submission of new program proposal to:
 - a. Council of Chief Academic Officers (CCAO)
 - b. BOR Committee on Academic and Student Affairs
 - c. Board of Regents

APPENDIX B
GUIDELINES FOR PROPOSALS FOR NEW ACADEMIC
PROGRAMS

The **action memo** from the Chancellor should make the campus case to the System/Board for approving this program as provisional by commenting on the following:

- Summarize the program and its role
- Why is this a priority for the campus/college
- Why should this program be established here?
- What need does it fill?
- How does it fit the campus mission as outlined in the IAFP?
- Summarize succinctly enrollment projections/achievements and planned/realized resource requirements and sources

The **program proposal** should include the following:

1. Executive Summary of the program.
2. Why is the program a priority for the unit; what needs/goals does it meet?
3. What are the expected enrollments in the program? From what sources?
4. What operating and instructional resources will the program need and where will they come from? What are the program's facilities needs?
5. What impact will developing this program have on resource (re)allocation in the unit?
6. Has there been consultation at the program level between campuses and within the originating campus? Please provide documentation about who was consulted, in what capacity, and when did it happen? What is the summary of the results of this consultation?
7. What risks are associated with the program?
8. Program details (curriculum, staffing, assessment, accreditation, etc.)
9. New Program Resource Template (spreadsheet).

Expected length is approximately 15 pages of text (not including appendix or figures).

APPENDIX C
REVIEW AND APPROVAL OF PROVISIONAL PROGRAMS

A. Guidelines for **Provisional to Established Programs**

Maximum length is 15-pages (not including appendix or figures).

1. Executive Summary

2. Alignment of program with mission and strategic planning of the Campus and University System

(Relationship to University mission and development plans, evidence of continuing need for the program, projections of employment opportunities for graduates, etc.)

3. Program enrollment and graduation of students using anticipated and actual enrollment figures. In other words, did the program meet its proposed targets?

(Analysis of numbers of majors, graduates, service to non-majors, employment of graduates, enrollment in graduate programs, etc.)

4. The instructional resources required for the program and how they were utilized compared with anticipated resources.

(Analysis of number and distribution of faculty, faculty areas of expertise, budget and sources of funds, and facilities and equipment.)

5. How the program is organized to meet its outcomes

(Identify any differences in the program from what was approved by the Board of Regents including any changes in curriculum requirements from what was proposed. An assessment of productivity and cost/benefit considerations within the overall context of campus and University "mission" and planning priorities. Include quantitative measures comparing, for example, SSH/faculty, average class size, cost per SSH, cost per major with other programs in the college, on the campus and, as appropriate, similar programs on other UH campuses.)

6. Evidence of student learning and student and program success.

(Summarize the assessment of whether or not students meet the program outcomes and the evidence used to reach this conclusion. Data on time to degree trends, retention and actions to increase retention and on time graduation. Indicators of program quality, e.g. accreditation or other external evaluation, student performance on external exams, student employer satisfaction, alignment with Hawai'i economic

demand, employment/graduate school trends of graduates, awards to faculty and students, etc.)

B. Quantitative Indicators for Provisional and Established Programs

The following data for the period of review specified in 5.201 are used in the program review process for both provisional and established programs. The data are provided by the campus administration to the program. Wherever possible, data are broken down by the level of instruction (e.g., lower division, upper division, certificates, minors, graduate or C.O., C.A., A.S.) and disaggregated in meaningful ways. Campus may add additional data points to this list.

Where possible, data from the program review should be integrated into the narrative of your proposal. Your proposal for established status should summarize and reflect on the review and self-study of the provisional program.

1. Number of majors
2. Student semester hours (SSH) taught, by major demographic groups.
3. FTE course enrollment (SSH divided by 15 for undergraduate-level and by 12 for graduate-level courses)
4. Percent SSH/FTE of own majors, of majors within college and all others
5. Number of classes (sections) offered,
6. Average class size (total student registrations divided by number of classes offered) and average fill rates (student registrations divided by course max) for all courses, including face-to-face courses and distance delivered courses
7. FTE faculty (SH taught/12) by tenure/tenure track and other faculty (temporary, 12s and lecturers)
8. Student-faculty ratio (FTE course enrollment divided by FTE faculty) for tenure/tenure track and other faculty
9. Number of degrees earned by majors (annual)
10. Retention rates
11. Graduation rate (100 and 150%)
12. Time to degree
13. Average credits earned at graduation by major
14. Budget allocation
15. Review to assure program continues to align with Classification of Instructional Programs (CIP) code.
16. Cost per SSH

C. Action memo for Provisional to Established (From the Chancellor/Provost):

- Summarize the program's role and its evolution since inception
- Why will this continue as a priority for the campus/college?
- Will it continue to meet needs and generate demand?

- Does the program integrate well with programs on this and other campuses? How will developments at other campuses affect this program in the future?
- Assess how well the program met proposed enrollments, completions operating and instructional resource and facility needs?
- What unexpected developments enhanced or challenged the program in its evolution?
- Defend the recommendation to make the program permanent

Adopted by CCAO 4/29/2020

Committee on Academic and Student Affairs

Annual Review for the 2021-2022 Academic Year

	Committee duties per bylaws	2021-2022 Committee Goals and Objectives	Projected Accomplishments			
			1 st Q Jul-Sept	2 nd Q Oct-Dec	3 rd Q Jan-Mar	4 th Q Apr-Jun
1	Review the academic mission and strategic direction of the system and its major units.	Review the strategic direction and supporting academic mission in the context of Repositioning UH for FY22 and Beyond (2/17/22 BOR meeting)			X	
2	Periodically review to what extent programs support the mission and strategic direction of the University.	Update on Administration's efforts in addressing current and future high demand critical workforce needs				
		Received Small Program and Program Review Report (5/5/22)				X
		Received Update on Hawai'i P-20 Initiatives (2/3/22)			X	
3	Monitor the quality and effectiveness of educational programs.	Received overview and campus updates on WASC Accreditation (10/7/21)		X		
		Received General Education Redesign Update (10/7/21; 2/3/22)		X	X	
		Received Annual Report on Faculty Workload Assignments (2/17/22 BOR meeting)			X	
		Received Student Caucus Report (~April BOR meeting)				X
4	Develop and maintain policies governing academic and student affairs.	Reviewed policies governing academic and student affairs and recommended revisions to: <ul style="list-style-type: none"> • RP 6.208, Board Exemptions to Non-Resident Tuition • RP 5.201, Instructional Programs (2/3/22; 5/5/22) 			X	X
5	Review actions proposed by the President which fall under current board	Received Annual Report on the Summary of Program Actions (5/5/22)				X

	policies and procedures, including requests for exceptions.	Reviewed and Approved New, Provisional, and Provisional-to-Established Academic Program Action Requests (2/3/22; 5/5/22)			X	X
6	<i>Committee Governance</i>	Reviewed committee work plan (10/7/21)		X		
		Reviewed committee's work for the year (5/5/22)				X